RALPH WALKER

Architect of the Century

Portrait Sketch by Count Mario Grixoni

Royal Arts Club, London, 1943

RALPH WALKER

Architect of the Century

Kathryn E. Holliday

RIZZOLI NEW YORK

New York · Paris · London · Milan

This book has been published in conjunction with the exhibition
Ralph Walker: Architect of the Century
Walker Tower, New York City, 2012

First published in the United States of America in 2012 by
Rizzoli International Publications, Inc.
300 Park Avenue South
New York, NY 10010
www.rizzoliusa.com

ISBN-13: 978-0-8478-3888-2
Library of Congress Control Number: 2011945504

© 2012 RIZZOLI INTERNATIONAL PUBLICATIONS, INC.
TEXT © 2012 KATHRYN E. HOLLIDAY

BOOK AND EXHIBITION CREATIVE DIRECTOR: RICHARD PANDISCIO
BOOK DESIGNER: WILLIAM LOCCISANO / PANDISCIO CO.

All rights reserved.
No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior consent of the publisher.

Every effort has been made to identify and contact the copyright holder for all the images in this publication. Any inaccuracies brought to our attention will be corrected for future editions.

Distributed to the U.S. trade by Random House, New York

Printed and bound in Iceland

2012 2013 2014 2015 / 10 9 8 7 6 5 4 3 2 1

CONTENTS

Author's Note 7

ARCHITECT OF THE CENTURY

Introduction 11

Restless Youth 20

Secure Position: McKenzie, Voorhees & Gmelin 24

Barclay-Vesey Telephone Building 28

Refining the Model 58

One Wall Street 82

Imagining a World of Tomorrow 98

The Postwar City and Suburb 120

Controversy and Rediscovery 136

Notes 140

RALPH WALKER IN HIS OWN WORDS

The Relation of Skyscrapers to Our Life 149

Index 158

Author's Note

THIS EXHIBITION AND CATALOG provide a welcome and unexpected opportunity to share new and recent research on the architect Ralph Walker. Walker was a central figure in the world of New York architecture from the 1920s to the 1950s — the *New York Times* proclaimed him "Architect of the Century" in 1957. He was iconoclastic, opinionated, and a gifted designer whose talents are best appreciated by visiting buildings like the Irving Trust Building (1928–31), now the home of BNY Mellon, at One Wall Street, and the Barclay-Vesey Telephone Building (1921–26), now the world headquarters of Verizon at 140 West Street. These buildings highlight Walker's dramatic sense of the scale of architecture and his ability to soften its hard edges with beautifully rendered ornament. A fresh look at Walker is long overdue.

I first got to know Walker while I was in graduate school, working on my dissertation about an entirely different architect, Leopold Eidlitz. Eidlitz, as my book *Leopold Eidlitz: Architecture and Idealism in the Gilded Age* shows, was a major figure in the mid-nineteenth century, a founding member of the American Institute of Architects in 1857 and the designer of the New York State Capitol (1876–1884), Temple Emanu-El (1876–78), St. George's Episcopal Church (1846–48), and the Brooklyn Academy of Music (1851), among many others. Eidlitz was also, by some measures, the first Jewish architect in America and was certainly one of the most theoretically minded

of his generation, blending his reading of German idealist philosophy with American transcendentalism to create a theory of organic architecture.

The link to Walker comes through Eidlitz's son Cyrus, who became a successful architect in his own right. Cyrus L. W. Eidlitz began his own practice in 1876 when he refurbished St. Peter's Church in the Bronx, a design of his father's that had been heavily damaged by fire. From there, his career eventually branched in a different direction and he established the firm Eidlitz & McKenzie in about 1904, signing on with a long-time employee, the engineer Andrew McKenzie, while in the midst of construction on the New York Times Building in Times Square. In a somewhat convoluted chain of events, Eidlitz & McKenzie became McKenzie, Voorhees & Gmelin in 1910; in 1926 that firm became Voorhees, Gmelin & Walker, providing a link from Leopold Eidlitz to Ralph Walker through succession. In the year 2000, as I began research on Eidlitz, I contacted the firm HLW International, which traces its roots back to the days of Eidlitz & McKenzie, in hopes of finding Leopold Eidlitz's records preserved in their corporate archive. While I was out of luck on that front, I did look through hundreds of drawings by Walker and his associates and the seeds of a new project were planted.

Since finishing the Eidlitz project in 2008, I have been at work tracing the firm's development from 1910 to 1939. In the meantime, and as luck would have it, HLW began planning an exhibit commemorating their 125th anniversary. As a consultant for that celebratory exhibit, held in 2010 at the Center for Architecture in New York, I was able to pull new material from the HLW archives that illuminates the firm's philosophy and, particularly relevant to this catalog, the ways Ralph Walker shaped their work.

This exhibit catalog, *Ralph Walker: Architect of the Century*, created with the support of Pandiscio Co., represents a small portion of that research, presented here to reintroduce Walker to the 21st century. I would particularly like to thank Ted Hammer and Keith Hanadel of HLW International for

their generous support of my work across the years. Additional thanks go to Elliott Joseph of Property Markets Group, Michael Stern of JDS Development Group, Richard Pandiscio and William Loccisano, and John Bonomo and Dominic Veltri of Verizon. Carol Willis, founder and director of the Skyscraper Museum provided invaluable context and critique and gave me the opportunity to share some early research on the Irving Trust Building as part of the museum's Wall Street exhibit programs in 2010. Janet Parks, Curator at the Avery Library at Columbia University provided gracious access to their unmatched collections. Louise Meière Dunn and Hilly Dunn generously shared their research about Hildreth Meière's remarkable career. The early stages of my research on Walker were supported by a research grant from the Provost's office of the University of Texas Arlington and my students there, especially Sachiko Fukushige, Stephen Wettermark, and Jack Gryczynski, have been an invaluable resource. Lisa Gelobter, Serene Lewis, and Tobie Cornejo provided much needed assistance in New York. Finally, my thanks to my husband David Dibble and son William who have made our treks to obscure Walker buildings across New York and New Jersey all the more enjoyable.

KATHRYN E. HOLLIDAY
School of Architecture
University of Texas Arlington
December 2011

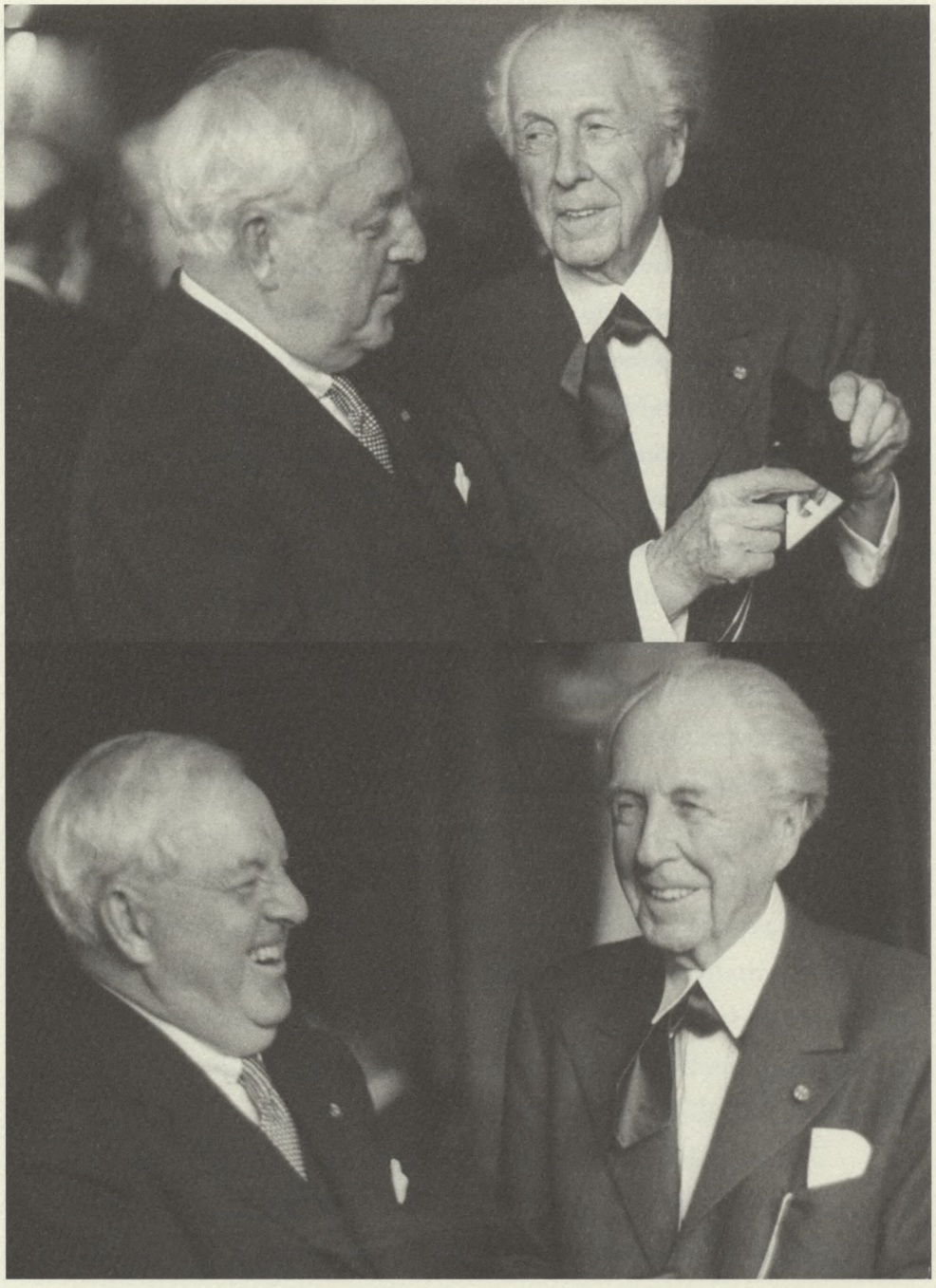


Figure 1. Ralph Walker and Frank Lloyd Wright in a jovial moment in 1956. Walker had just presented Wright with a Gold Medal at the awards ceremony of the American Academy of Arts and Letters.

Photograph by Hally Erskine, Time & Life, Getty Images.

ARCHITECT OF THE CENTURY

Introduction

In May 1957, a *New York Times* headline proclaimed Ralph Thomas Walker "Architect of the Century," a singular title for an accomplished architect.[1] Walker (1889–1973) had just earned the Centennial Medal of Honor from the American Institute of Architects, a one-time honor given to commemorate the hundredth anniversary of the AIA's founding. Walker, the awards committee declared, was an architect, a philosopher, and a humanitarian, and "his brilliance . . . will brighten a long span of the century that beckons."[2] Now, midway through that next century, the time is ripe to revisit Ralph Walker, the architect whom Frank Lloyd Wright, notoriously skimpy with his praise, dubbed "the only other honest architect in America"[3] (Fig. 1).

His career first blossomed in the 1920s in New York when he was design principal for the firm Voorhees, Gmelin & Walker, one of the most successful and prolific firms in the city. As one of the "three little Napoleons," Walker, along with Raymond Hood and Ely Jacques Kahn, ruled the skyline. Together, they redefined the skyscraper in New York and in America, leading to a decade of innovation and experimentation (Fig. 2). Walker and his peers designed what are now often called "art deco" buildings, buildings shaped like ziggurats and covered in wildly inventive ornament crafted from luxurious materials like brass, stainless steel, and chrome. The term art deco came into use, though, in the 1960s to describe the opulent, fantastical designs of a bygone era.[4]

Architects in the 1920s called their designs simply "modern" or "modernistic," distinguishing their work from the historicizing modes of Beaux-Arts Classicism.

Walker helped pioneer this new "modernistic" architecture of New York in the 1920s, capturing the prosperity, energy, optimism, and luxury of the Jazz Age. Indulging in legendary four-hour Friday lunches with Hood, Kahn, and Joseph Urban, Walker rode a wave of economic prosperity and technological innovation.[5] His Barclay-Vesey Telephone Building, begun in 1921, was hailed as the "first skyscraper of the modern age"[6] (Fig. 3). His design for the Irving Trust Building at One Wall Street, with its cascades of rippling limestone, expressed his ideas about a "humanist" architecture that used form, texture, and ornament to connect emotionally with the thousands of people rushed and alienated by busy city life (Fig. 4).

The building boom of the 1920s was relatively short-lived. By the early 1930s, as the nation sank into the Great Depression, architects and the public became uneasy with these virtuosic expressions of architectural ornament. At the Chicago World's Fair of 1933 and the New York World's Fair of 1939, Walker, with his colleagues, explored a more subdued image of a brighter tomorrow, buildings stripped down and ornament minimized (Fig. 5).

The Depression saw another change in Walker's design, as he moved his attention away from the city and toward the suburbs. After World War II, most of his and his firm's work was outside the city, in the exploding suburbs of Connecticut, New Jersey, and New York. Walker's firm built the new suburban landscape of the 1950s: the research labs for Bell Laboratories in Murray Hill, New Jersey, the campus for the new nuclear research facility at Argonne National Laboratory outside Chicago, as well as complexes for IBM, General Foods, the Ford Motor Company, General Electric, DuPont, Bethlehem Steel, Coty Cosmetics, and more (Fig. 6).

Walker, while never busier, gradually became more and more frustrated by these changes in the design world. The scale and bureaucratic scope of the government and corporate campuses his firm designed also made it

increasingly difficult for him to define himself as an individual within the corporate practice of Voorhees, Walker, Foley & Smith, as the firm had been known since 1938. Walker channeled his energy and frustration into the creation of an independent public persona. He became a central figure in the

Figure 2. The famous Beaux-Arts Ball of 1931, a "Fête Moderne" held at the Hotel Astor, where architects dressed as the buildings they had designed. From left to right: A. Stewart Walker as the Fuller Building, Leonard Schultze as the Waldorf-Astoria Hotel, Ely Jacques Kahn as the Squibb Building, William Van Alen as the Chrysler Building, Ralph Walker as the Irving Trust, D. E. Ward as the Metropolitan Tower, and Joseph Freedlander as the Museum of the City of New York.

Dept. of Drawings & Archives, Avery Architectural and Fine Arts Library, Columbia University.

Figure 3. McKenzie, Voorhees & Gmelin, Barclay-Vesey Telephone Building, 1921–26, viewed from the Hudson River shortly after its completion.

Photograph by Sigurd Fischer, Ralph Walker, Architect *(1957).*

professional landscape, having begun locally as president of the New York Chapter of the American Institute of Architects (1933–34), of the Architectural League of New York (1938), and of the Municipal Art Society (1940–41). He then moved to the national stage as president of the American Institute of Architects in 1949, where he created the prestigious College of Fellows, which first inducted members in 1952. He was part of the international group of architects that organized the *Union Internationale des Architectes* in Lausanne, Switzerland, in 1948, and he served as its first vice-president. He was a member of the committee that guided the design process of the United Nations Headquarters (1947), a member of the Architectural Advisory Committee that selected architects to design American embassies (1954), a member of the Mayor's Commission that rewrote the City Plan of New York (1958), a member of President Dwight D. Eisenhower's Commission of Fine Arts (1959–61), and a member of President John F. Kennedy's President's Council on Pennsylvania Avenue (1962–64). Walker was Chairman of the Benjamin Franklin Foundation in the late 1950s, a funding organization that, with Eleanor Dulles's guidance, made possible major reconstruction projects in post-war Berlin, most notably Hugh Stubbins's Berlin Congress Hall.[7] There were many more positions — on the board of the New School for Social Research and the Lavanburg Foundation — all tied to his growing sense that the practice of architecture had lost its way since the Great Depres-

Figure 4. Voorhees, Gmelin & Walker, Irving Trust, One Wall Street, New York, 1928–31.

Photograph by Ira Wright Martin. Courtesy HLW International LLP.

sion. In taking these positions, Walker became increasingly controversial. He was a polarizing figure, publicly decrying the advent of the "clean" lines of International Style modernism and arguing for a return to an architecture of ornament and a philosophy of "humanism."[8] He wrote and lectured constantly after World War II, using his administrative positions as a pulpit to share his humanist position.

By 1958, Walker was a senior statesman of American architecture and seemed poised, as the recipient of the Centennial Medal, to move gracefully into his retirement. But the accolades of his AIA colleagues were balanced by tension with a new generation of practitioners. Walker's great works of the 1920s were now dismissed by critics. In a 1952 guide to New York's architecture, the city's art deco skyscrapers are glossed over. Written specifically for the AIA convention held in New York that year, just a year after Walker's presidency, it highlighted the new architecture, the glass and steel of Skidmore, Owings and Merrill's newly completed Lever House and Mies van der Rohe and Philip Johnson's Seagram Building.[9] This was more than an oversight — it was part of a battle that architects were waging over the true language of modern architecture. Walker took these changes in the world of design personally and, by the end of his career, was frequently at war with his fellow architects.

This exhibit and essay offer a glimpse at the contours of Walker's career as part of the larger project of creating a better understanding of the context of architectural practice in the interwar years in America. Innovation was essential to the expression of modern urban life — but we still have much to discover about how American architects approached the making of architecture in the city in the 1920s and 1930s. Walker forged a new form of American modernism that balanced the growing influence of technology on everyday life against a tradition of craft by focusing on collaboration between corporations, architects, engineers, artists, and craftsmen. By taking a fresh look at his work, we can deepen our understanding of the ways these collaborations shaped our cultural landscapes.

Figure 5. Voorhees, Walker, Foley & Smith, AT&T Pavilion, New York World's Fair, 1939.

New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

Figure 6. Voorhees, Walker, Foley & Smith, Bell Laboratories, Murray Hill, New Jersey, 1938–41.

Photograph by Sigurd Fischer. Courtesy HLW International LLP.

THE NEW YORK TIMES, MAY 17, 1957.

Architect of the Century

Ralph Thomas Walker

Special to The New York Times.

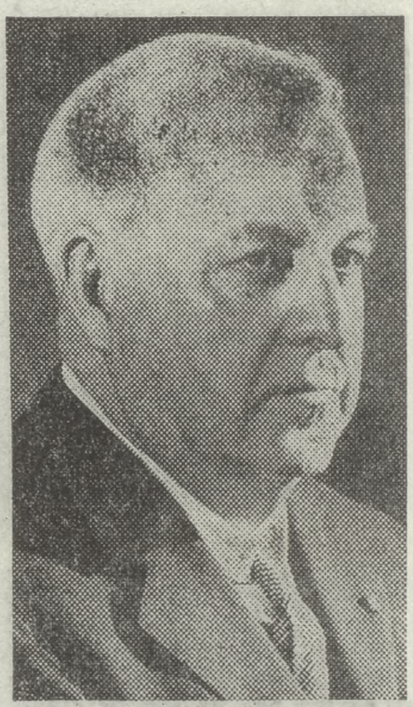
WASHINGTON, May 16—In picking an architect to receive an award they plan to bestow only once a century, the American Institute of Architects did not look for a man who had won fame for his virtuoso performances in designing "showpiece" buildings. They sought instead an architect whose total effort to advance his profession and whose extensive public service were deemed worthy of exceptional recognition.

Man in the News

They found him in Ralph Thomas Walker, who began work in an architect's office in Providence, R. I., fifty years ago next month, and who today is a partner in one of the country's largest architectural firms, Voorhees, Walker, Smith & Smith, 101 Park Avenue, New York. This evening Mr. Walker received the institute's centennial medal of honor for his "unstinting use of his talents and energies in many fields of public service."

An Iconoclast, Too

The recipient of many awards and decorations both here and abroad, Mr. Walker has gained one other distinction that he considers unusual. Frank Lloyd Wright, the architect who probably could not have avoided winning the



"The only other architect in America"

ers, Masons and Plasterers International Union.

And although he's had some hand in shaping New York's skyline, he isn't happy with it. What, he asks, is beautiful about a skyline "that looks like a broken comb?" He believes buildings can be monumental without being enormous in scale.

A Human Catalyst

Mr. Walker is a medium-sized, stocky man with an impressive leonine head topped by a shock of white hair. He

* * *

THE NEW YORK TIMES, MAY 17, 1957

Architect of the Century: Ralph Thomas Walker

WASHINGTON, May 16—In picking an architect to receive an award they plan to bestow only once a century, the American Institute of Architects did not look for a man who had won fame for his virtuoso performances in designing "showpiece" buildings. They sought instead an architect whose total effort to advance his profession and whose extensive public service were deemed worthy of exceptional recognition.

They found him in Ralph Thomas Walker, who began work in an architect's office in Providence, R. I., fifty years ago next month, and who today is a partner in one of the country's largest architectural firms, Voorhees, Walker, Smith & Smith, 101 Park Avenue, New York. This evening Mr. Walker received the institute's centennial medal of honor for his "unstinting use of his talents and energies in many fields of public service."

An Iconoclast, Too

The recipient of many awards and decorations both here and abroad, Mr. Walker has gained one other distinction that he considers unusual. Frank Lloyd Wright, the architect who probably could not have avoided winning the institute's centennial medal if it had been awarded for pacemaking design of buildings – and whose iconoclasm is matched only by his supreme disdain for the work of most of his fellows – once referred to Mr. Walker as "the only other architect in America."

Mr. Walker qualifies as something of an iconoclast himself. Although he could not be called a traditionalist in his architectural viewpoint, he is not particularly enamored of the current trend toward using large expanses of glass to form the exteriors of office buildings, factories, apartment houses and private homes.

"I don't see what's wrong with the so-called 'wall punched with holes,'" he says. "Why must we glorify the endless ribbon of plate glass? In a world of humid glare, ordinary windows make more sense than the continued stretch of Venetian blinds, which, jail-like, preclude vision."

Mr. Walker's championing of masonry construction in preference to steel and glass has not been without its rewards. He holds an honorary membership in the Bricklayers, Masons and Plasterers International Union.

And although he's had some hand in shaping New York's skyline, he isn't happy with it. What, he asks, is beautiful about a skyline "that looks like a broken comb?" He believes buildings can be monumental without being enormous in scale.

A Human Catalyst

Mr. Walker is a medium-sized, stocky man with an impressive leonine head topped by a shock of white hair. He is most frequently described by his colleagues as a human catalyst. He is impatient to get on with any project he has in mind. Though he likes to think of himself as a rebel in his ideas, his associates believe he frequently does or says the unexpected in order to galvanize others into action.

A native of Waterbury, Conn., he received his architectural training at Massachusetts Institute of Technology, and subsequently won a traveling scholarship, which took him to Europe. He since has become an inveterate traveler, and has made thirty trips to Europe in the last decade, to vacation or to meet with architects of other countries.

His domestic travel is also prodigious. Even today, at the age of 67, he thinks nothing of flying to Chicago for a luncheon date. Locally, he races around in a Ford Thunderbird.

With his wife, Stella, whom he married in 1913, he has lived in Chappaqua, N. Y., for the last thirty-four years. The Walkers live in a house that the architect converted from a two-story barn. He took off the top story and placed it alongside what was left.

Restless Youth

Walker was born in 1889 in Waterbury, Connecticut, the son of Thomas and Marion Walker. Thomas was a factory worker and manager and the family moved frequently, following the trail of jobs that he picked up in Connecticut, Rhode Island, and Massachusetts.[10] By Walker's high school years, they had settled in Providence, where he graduated from Classical High School. It was Walker's father who aspired for him to become an architect, to move a step up the professional ladder. In keeping with the family's working-class ways, the eighteen-year old Walker did not immediately head to college but was instead apprenticed to the Providence architects Hilton & Jackson in 1907. Howard K. Hilton was the driving force behind the firm, a professional man, an active member of the AIA, and a well-respected member of Providence society.[11] Walker worked long days for low pay, later describing his experience as being "like something out of Dickens."[12] Upon Hilton's death in 1909, Walker began attending the School of Architecture at MIT as a "special student," a designation for young men who already had professional experience in drafting and design.[13] He was a member of the class of 1911 but left in his final semester before graduating to return to work full-time.

Walker would later claim that he left MIT because of frustration with the school's curriculum and approach to design, chafing at its strict adherence to Beaux-Arts principles. Seeing Joseph Urban's innovative designs for the Boston Opera Company performance of Debussy's Pelléas et Mélisande, he recollected, inspired his dissatisfaction with his school projects. His MIT professors asked students to design an opera house but expected them to look to the past rather

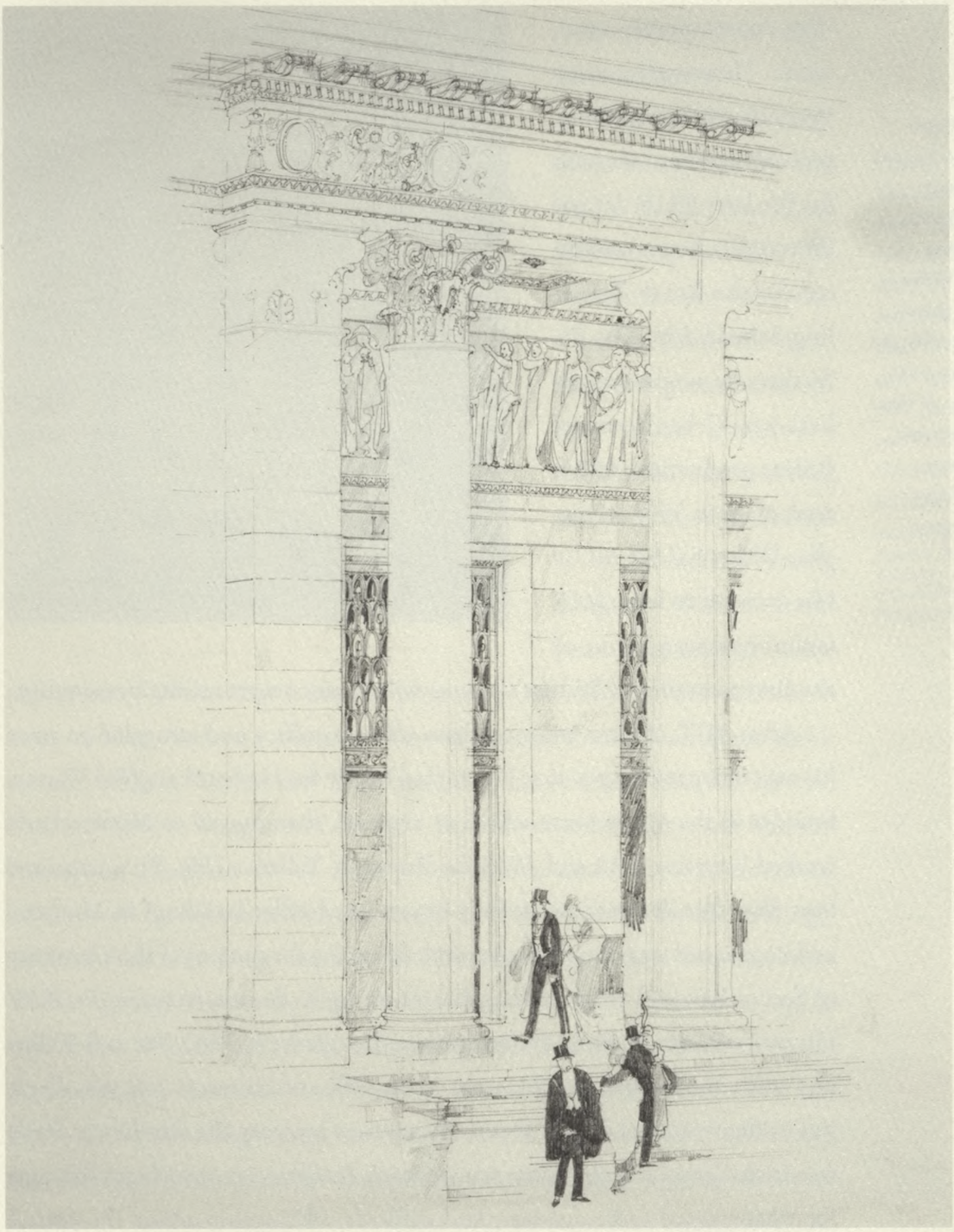


Figure 7. Ralph Walker, competition drawings for the Rotch Travelling Scholarship, 1916.
Walker's entry was a design for an opera house. Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

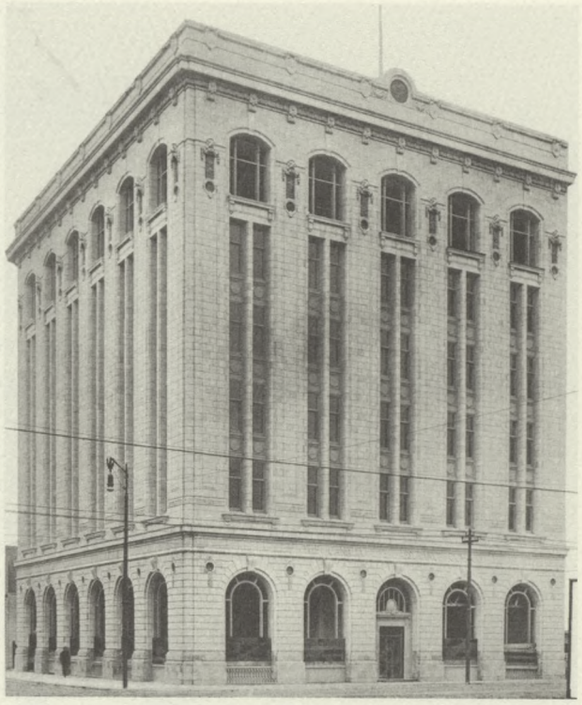


Figure 8. Brown & Vallance, Canada Life Assurance Building, Regina, Saskatchewan, 1913–14. Walker worked for Brown & Vallance while this building was under construction. Its blend of Beaux-Arts and Louis Sullivan informed Walker's early professional education.

Western Architect *19 (December 1913).*

than contemporary innovation. These student investigations, while frustrating, probably provided the basis for his later 1916 designs for an opera house, submitted for the Rotch Travelling Scholarship (Fig. 7). By then, he would actually have seen Urban's seminal Pelléas production, which took place in 1912, a year after Walker had left MIT.[14] His decision to leave MIT is thus best seen as one of the first examples of Walker's strong-willed, uncompromising personality.

After MIT, Walker bounced from office to office and struggled to open his own independent practice. He worked briefly for Herbert Langford Warren, founder of the architecture school at Harvard, then moved to Montreal and worked between 1912 and 1913 for Brown & Vallance (Fig. 8), a large and busy firm that designed beautifully-ornamented office buildings in Montreal and Regina and was completing its work designing the campus of the University of Saskatchewan.[15] He moved again, returning to Boston to marry in 1913. His new wife was Stella A. Forbes, born in Providence in 1882. She and Walker met while she worked as a secretary in the office of Hilton & Jackson. There was evidently some conflict about the marriage between the families, as Stella was Irish Catholic and Walker was Scottish Presbyterian, which set the tone for what proved to be a stormy and difficult relationship across the years.[16] With a wife to support, Walker worked with James H. Ritchie, a Boston architect with small offices on Beacon Street for the next few years and took on small

Restless Youth

Figure 9. Bertram Grosvenor Goodhue, State Capitol, Lincoln, Nebraska, 1922–32. Walker briefly had office space in Goodhue's office upon his return from the war in 1919 and he admired Goodhue throughout his career.

Photograph by Carol M. Highsmith, 2007. Carol M. Highsmith's America, Library of Congress, Prints and Photographs Division.

independent jobs for neighbors and family.

Walker's break came when he applied for and won a Rotch Travelling Scholarship in 1916. The Boston Society of Architects ran (and still runs) the prestigious competition which awarded a fully-funded two-year-long period of travel in Europe to a promising young designer.[17] Walker's travel years were delayed by the hostilities of World War I, but the prize more immediately allowed him to move to New York and work for some of the city's most prestigious architectural offices: Warren and Wetmore, designers of Grand Central Station; York and Sawyer, designers of the New-York Historical Society; and Bertram Grosvenor Goodhue. Of all these potential role models, it was Goodhue, known both for his work with abstracted Gothic forms and for the strikingly modern Nebraska State Capitol (1922), who remained an inspiration to Walker through his career (Fig. 9). But these jobs soon came to an end as well, when Walker joined the Camouflage Section of the Army Corps of Engineers as a lieutenant stationed in Dijon, France, between 1917 and 1919. The camouflage corps was filled with artists, sculptors, architects, engineers, and craftsmen, all engaged in painting and designing uniforms, equipment, and scenography to disguise enlisted men, their equipment, and encampments.[18] This experience would later become central to Walker as he prepared his firm for building military bases for World War II.

Secure Position: McKenzie, Voorhees & Gmelin

When he returned from France, Walker made a decision that determined the trajectory of the rest of his career. In 1919, he joined the office of McKenzie, Voorhees & Gmelin, a prosperous, if not distinguished, New York firm, where he remained until his retirement in 1959. Walker recalled that he had other offers but that Andrew McKenzie, who had been with the firm since the mid-1890s, "showed me a pot of gold at the end of a possible rainbow."[19] In other words, it was money that induced Walker to choose the firm over another offer from Holabird & Root in Chicago (Walker served alongside John Root in the Camouflage Corps). Since 1886, McKenzie, Voorhees & Gmelin had been the primary designer of buildings for the New York Telephone Company and telecommunications equipment manufacturer Western Electric, and had provided national consulting services to AT&T. In 1920, the firm was engaged in four projects for New York Telephone and one for Western Electric. The contracts ranged in value from $80,000 to $3 million, with total billing for these five projects from the telephone company alone adding up to nearly $5 million (about $54 million today). At the standard architect's contract rate of 5–10 percent, these numbers meant McKenzie, Voorhees & Gmelin were prosperous indeed.[20]

The firm's designs, however, while efficient and functional for their corporate clients, were not highly regarded. As Walker recalled, a colleague at York and Sawyer told him that "McKenzie, Voorhees & Gmelin had a great deal of work, which they did badly," and Andrew McKenzie himself claimed to be unhappy with his firm's work.[21] Walker was explicitly hired as

Figure 10. Cyrus L. W. Eidlitz and Andrew McKenzie, New York Times Building, Broadway and 42nd Street, 1901–1904. The first building in New York to connect to a subway station beneath it.

Photograph by Detroit Publishing Company, 1908. Library of Congress, Prints and Photographs Division.

Figure 11. McKenzie, Voorhees & Gmelin, 227 East 30th Street Telephone Building, 1921. This rather plain building was typical of the work the firm did in the teens after Eidlitz retired, and before Walker became chief designer. Courtesy HLW International LLP.

"chief designer" to work collaboratively with the firm's engineers, who had enormous experience working effectively with the telecommunications industry but little aspiration to aesthetics. Andrew McKenzie joined the practice of architect Cyrus L. W. Eidlitz in the mid-1890s and they created a partnership, Eidlitz & McKenzie, in 1904, as they worked together on the New York Times Building (1902–05), the celebrated centerpiece of the new Times Square (Fig. 10).[22] When Eidlitz left the firm in 1910 to enjoy his retirement in East Hampton on Long Island, the firm promoted two of its engineers, Paul Gmelin, who had also been with Eidlitz since the 1890s, and Stephen Voorhees, who joined upon his graduation from Princeton's engineering program in 1900.[23] Through the teens the firm was thus run by three engineers whose designs were at the vanguard of telecommunications infrastructure but appeared on the exterior to be conservative, workaday interpretations of the prevailing classical Beaux-Arts language of the day (Fig. 11).

Secure Position: McKenzie, Voorhees & Gmelin

Walker quickly rose through the ranks and transformed the firm's practice. By the middle of the 1920s, the firm, under Walker's guidance, began to win design awards and its work appeared in newspapers and on magazine covers. Technological innovation was now paired with aesthetic innovation. Walker described himself as the firm's "analyst of beauty," and established himself as a master of design and ornament in modern buildings.[24] This transformation took place seemingly overnight — but Walker was in the right place at the right time. His firm changed and its main client, the New York Telephone Company, changed too.

Barclay-Vesey Telephone Building

The Barclay-Vesey Telephone Building, begun for the New York Telephone Company in 1921 and completed in 1926, put Walker on the map as an innovative, ground-breaking designer. Located on West Street and looming over the Hudson River below, the Barclay-Vesey Building was celebrated as a revelation.[25] Howard Robertson, writing for the *Architect and Building News*, was awed and amazed: "In daylight it dominates over its near neighbours like a thickset Gulliver over groups of rather anæmic Lilliputians; but at night time, with all its windows ablaze and winking, it assumes the air of some fairy palace"[26] (Fig. 12). The artist Joseph Pennell, who spent years sketching the city's streets and skyscrapers, called it "the most impressive modern building in the world."[27] The building was considered so radical that it appeared as the frontispiece illustration to the American edition of Le Corbusier's avant-garde treatise *Towards a New Architecture* in 1927 (Fig. 13), despite the fact that Walker and Le Corbusier had almost nothing in common architecturally (and, ironically, Walker spent the rest of his career attacking the ideas in *Towards a New Architecture*).[28] Today, with the creation of Battery Park City and the growth of the Financial District, the building's visual impact has been diminished, crowded by the World Trade Center complex and the World Financial Center. But through the 1960s, the Barclay-Vesey Building defined the lower Manhattan skyline as viewed from the Hudson River.[29]

The Barclay-Vesey building evolved out of a complex intersection of corporate and economic concerns with innovative design. In the early 1920s, AT&T radically shifted its policy on its corporate architecture. Before World

Figure 12. The Barclay-Vesey Telephone Building at night, looming over the buildings below.

Photograph by the New York Edison Company, 1928, Museum of the City of New York.

THE TELEPHONE BUILDING, NEW YORK

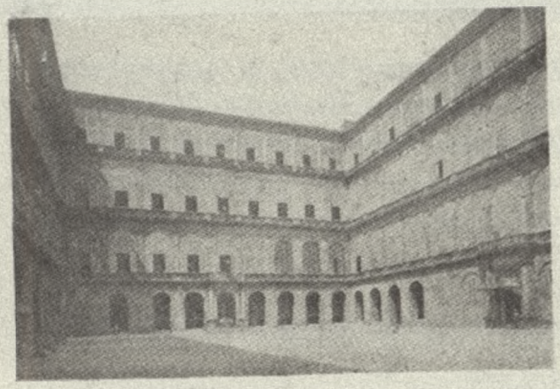
TOWARDS A NEW ARCHITECTURE

by

LE CORBUSIER

translated from the thirteenth French edition with an introduction by

FREDERICK ETCHELLS



PAYSON & CLARKE LTD

NEW YORK

302264

Barclay-Vesey Telephone Building

Figure 13. A photograph of the Barclay-Vesey Building served as the frontispiece to the American edition of Le Corbusier's avant-garde manifesto Towards a New Architecture, *published in 1927 (the French edition had appeared in 1923). While the building clearly embodied the "new" from a technological perspective, it was not in keeping with the kind of "new" Le Corbusier had in mind.*

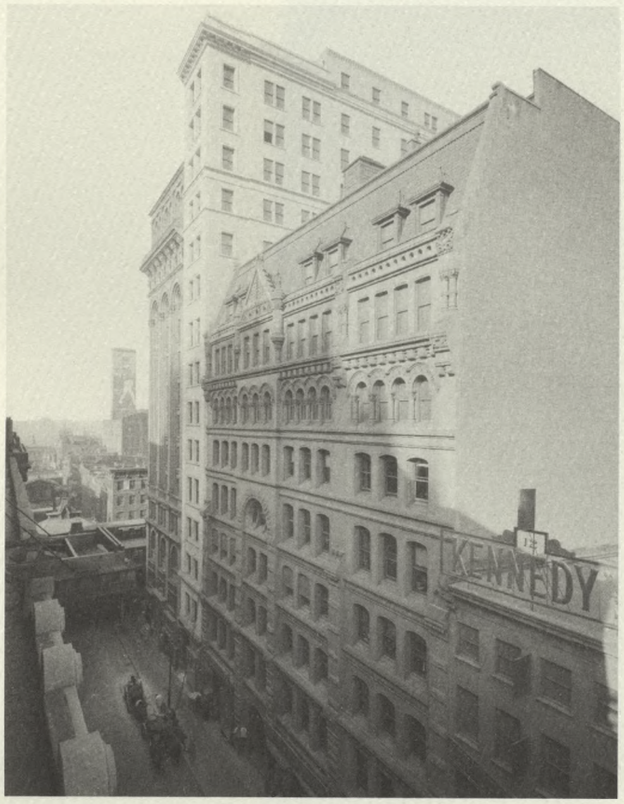


Figure 14. Cyrus L. W. Eidlitz, Metropolitan Telephone Building, 14–22 Cortlandt Street, New York, first phase 1886 (now demolished). This was the first purpose-built telephone building in the city and it was expanded by Eidlitz at least twice.

Photograph by Wurts Bros., 1905, Museum of the City of New York.

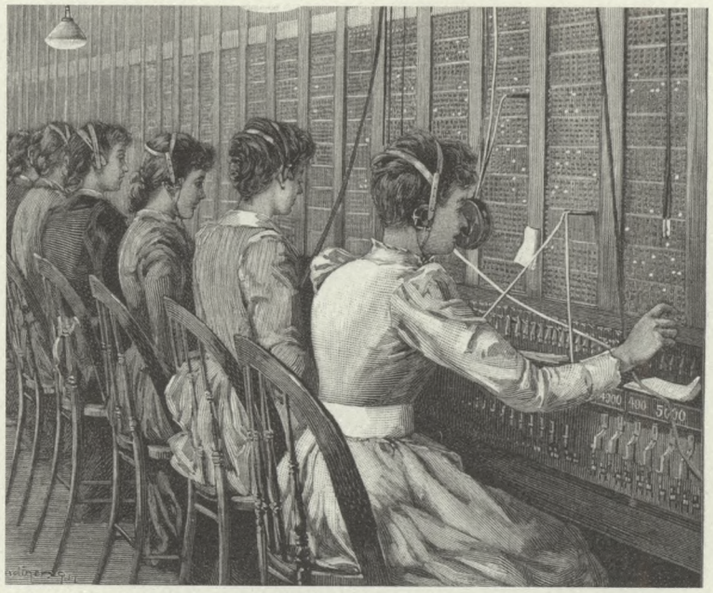
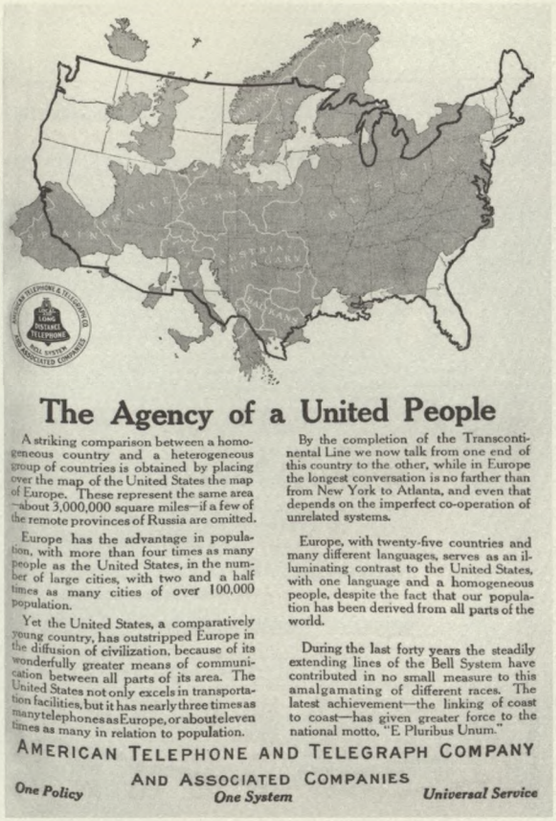


Figure 15. The new telephone building on Cortlandt Street was the subject of much fascination. This image of telephone operators at work was part of a feature article on the new building in Harper's Weekly *in October 1886.*

Barclay-Vesey Telephone Building

War I, the many regional telephone companies owned by AT&T, which included the New York Telephone Company, housed their operations in buildings that fit in with their neighborhoods, mimicking the scale and form around them and disguising the presence of the industry within the community. Typical of this approach was Cyrus Eidlitz's design for the first telephone building in Manhattan at 18 Cortlandt Street, a Romanesque Revival structure that blended seamlessly into the eclectic office buildings surrounding it (Figs. 14–15). Built in response to an 1885 law that required all telephone lines in the city to be buried, Cortlandt Street was the first example of a new model for telephone buildings that Eidlitz, and later McKenzie, would pioneer.



The Agency of a United People

A striking comparison between a homogeneous country and a heterogeneous group of countries is obtained by placing over the map of the United States the map of Europe. These represent the same area —about 3,000,000 square miles—if a few of the remote provinces of Russia are omitted.

Europe has the advantage in population, with more than four times as many people as the United States, in the number of large cities, with two and a half times as many cities of over 100,000 population.

Yet the United States, a comparatively young country, has outstripped Europe in the diffusion of civilization, because of its wonderfully greater means of communication between all parts of its area. The United States not only excels in transportation facilities, but it has nearly three times as many telephones as Europe, or about eleven times as many in relation to population.

By the completion of the Transcontinental Line we now talk from one end of this country to the other, while in Europe the longest conversation is no farther than from New York to Atlanta, and even that depends on the imperfect co-operation of unrelated systems.

Europe, with twenty-five countries and many different languages, serves as an illuminating contrast to the United States, with one language and a homogeneous people, despite the fact that our population has been derived from all parts of the world.

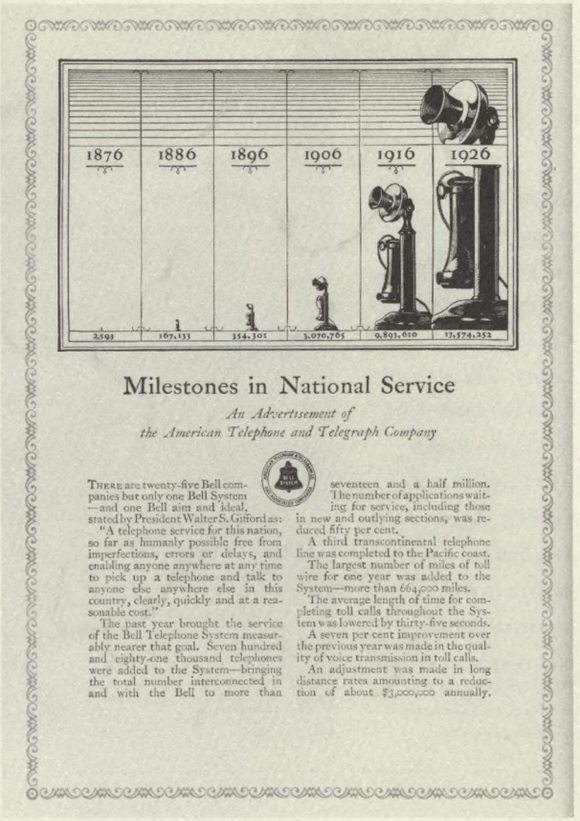
During the last forty years the steadily extending lines of the Bell System have contributed in no small measure to this amalgamating of different races. The latest achievement—the linking of coast to coast—has given greater force to the national motto, "E Pluribus Unum."

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

AND ASSOCIATED COMPANIES

One Policy *One System* *Universal Service*

Figure 16. Theodore Vail devised a new slogan for AT&T that emphasized the union of all the regional telephone companies: "One Policy, One System, Universal Service." Wartime advertisements, like this one from Atlantic Monthly *(1917), focused on the role of the telephone in uniting America as a single nation unlike the fractured nations of Europe.*



Milestones in National Service

An Advertisement of the American Telephone and Telegraph Company

THERE are twenty-five Bell companies but only one Bell System —and one Bell aim and ideal, stated by President Walter S. Gifford as: "A telephone service for this nation, so far as humanly possible free from imperfections, errors or delays, and enabling anyone anywhere at any time to pick up a telephone and talk to anyone else anywhere else in this country, clearly, quickly and at a reasonable cost."

The past year brought the service of the Bell Telephone System measurably nearer that goal. Seven hundred and eighty-one thousand telephones were added to the System—bringing the total number interconnected in and with the Bell to more than seventeen and a half million. The number of applications waiting for service, including those in new and outlying sections, was reduced fifty per cent.

A third transcontinental telephone line was completed to the Pacific coast.

The largest number of miles of toll wire for one year was added to the System—more than 664,000 miles.

The average length of time for completing toll calls throughout the System was lowered by thirty-five seconds.

A seven per cent improvement over the previous year was made in the quality of voice transmission in toll calls.

An adjustment was made in long distance rates amounting to a reduction of about $3,000,000 annually.

Figure 17. 1926 marked the fiftieth year of telephone service in the United States. This graphic from the Telephone Review *documented the remarkable surge in AT&T subscribers across those years.* Telephone Review *(June 1927). Science, Business & Industry Library, The New York Public Library, Astor, Lenox & Tilden Foundations.*

Nothing on the building's exterior suggested that it actually housed the miles of wire and hundreds of switches needed for telephone operations.

During the 1920s, AT&T took on a massive expansion campaign. It had its roots in the nationalization of the many local telephone systems announced by AT&T President Theodore Vail in 1908, when the telephone company began advertising using the slogan "One Policy, One System, Universal Service" (Fig. 16). In 1915, the first coast-to-coast line, connecting New York and San Francisco, began service. Continued expansion was briefly stemmed by American involvement in World War I, so by 1919, at the war's end, there was a pent-up need for expansion. In the booming postwar economy, telephone rates made

Figure 18. The telephone operator, or "telephone girl," quickly became a key figure in popular culture. The musical "The Telephone Girl," by Gustav Kerker and Hugh Morton (1898), suggested the new, central role of women in public communication.

Music Division, The New York Public Library for the Performing Arts, Astor, Lenox & Tilden Foundations.

private lines newly accessible to more and more people. Telephone service exploded and new infrastructure was essential. In New York, the telephone company reported adding 205,000 new telephones in 1924, an increase of 10 percent in one year alone (Fig. 17).[30] The regional telephone companies held by AT&T needed to become more visible.[31]

Part of this expansion campaign depended on the regional telephone companies creating new corporate headquarters across the nation, from New York to San Francisco, St. Louis, Denver, Atlanta, Chicago, and Dallas. These investments in infrastructure created a new visual presence for the telephone that tied into changes in American consumer culture and advertising. The New York Telephone Company began its building campaign first, in 1921, and provided a model for new telephone headquarters across the country. The Barclay-Vesey Building represented the New York Telephone Company and AT&T's new corporate power, no longer sandwiched into neighborhoods around the city but boldly expressive of "the restlessness of an industry whose job is a continual anticipation of public demand . . . and an immediate forging ahead into the future."[32]

The new headquarters building on West Street was to consolidate those scattered offices and provide a newly unified and glamorous public image for the telephone itself.[33] A major part of AT&T's expansion depended on deeper market penetration, moving the telephone from its central role in the business world into the domestic market, into homes and apartments. The domestic world was ruled by women, and the telephone company responded by amplifying

Barclay-Vesey Telephone Building

Figure 19. By the late 1920s, in keeping with the image of the "flapper," the telephone girl had become more glamorous, as this Telephone Review *cover from August 1929 suggests; cover design by Otto Bauman.*

Science, Business & Industry Library, The New York Public Library, Astor, Lenox & Tilden Foundations.

its image as a fashionable, social accessory of modern life. The modern, single "telephone girl," already a staple of American popular culture, got a makeover — and so did the telephone building (Figs. 18–19).

This emphasis on newness, on modernity, and on change gave Walker the chance he needed to begin crafting a new language for architecture. He began work on the Barclay-Vesey Building designs in 1921, the same moment that he created an entry for the now-famous Chicago Tribune Tower competition. Howells and Hood won the competition with an ornate Gothic Revival design but it was Finnish architect Eliel Saarinen's second-place entry that captured the imagination of architects, who admired its planar simplicity, free from overtly historicizing ornament.[34] Walker's entry was somewhere between the two, a setback skyscraper with simple Romanesque details that recalled Goodhue's work and that, like Saarinen's entry, emphasized the mass of the building (Figs. 20–22). The competition, and the adulation given to Saarinen's entry, shaped Walker's thinking about the Barclay-Vesey Building.

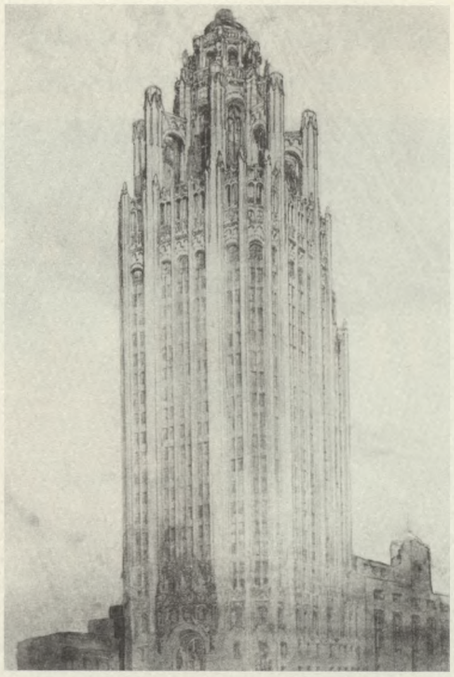
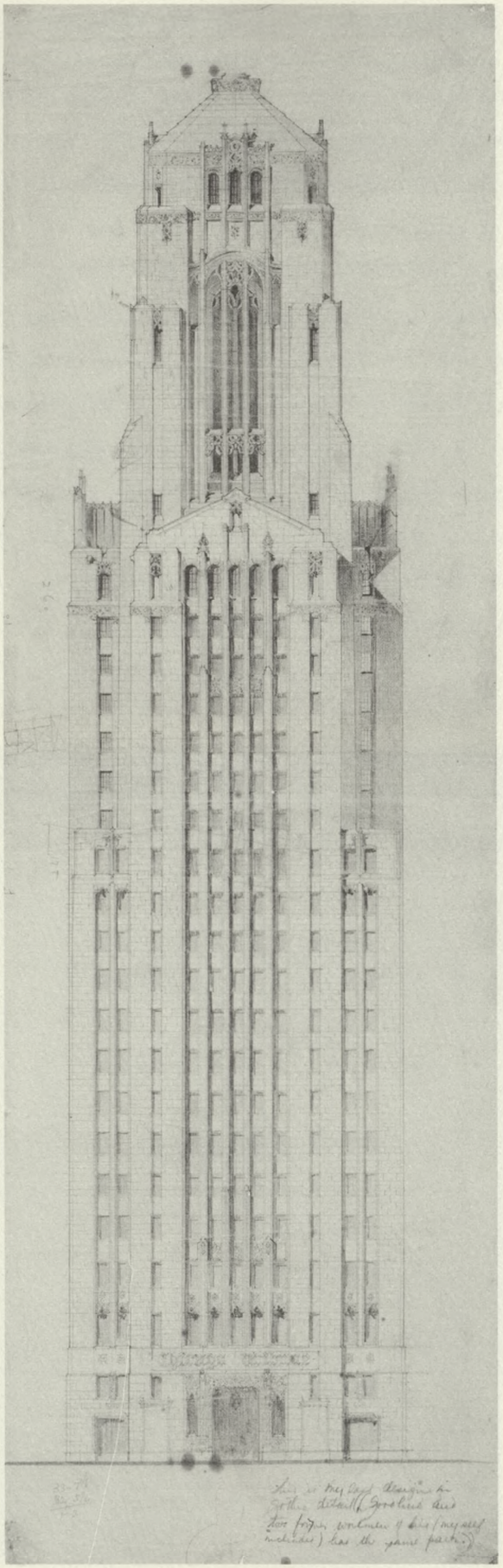


Figure 20. Raymond Hood, Chicago Tribune Tower Competition design study, 1922. Hood's neo-Gothic design was the winning entry.

Dept. of Drawings & Archives, Avery Architectural and Fine Arts Library, Columbia University.

Figure 21. Eliel Saarinen, Chicago Tribune Tower Competition design study, 1922. Saarinen's entry won second place but was widely considered by architects to be the best design.

Dept. of Drawings & Archives, Avery Architectural and Fine Arts Library, Columbia University.



Barclay-Vesey Telephone Building

Figure 22. Ralph Walker, Chicago Tribune Tower Competition design study, west elevation, 1922. Graphite on tracing paper.

Art Institute of Chicago 1989.333, through prior gift of Carson, Pirie, Scott and Company and Three Oaks Wrecking Company.

Barclay-Vesey Telephone Building

Walker's competition entry also showed that he had begun to take tentative steps toward thinking productively about the New York City Zoning Resolution of 1916. The Zoning Resolution required tall buildings to "step back" away from the street a certain amount for each foot of vertical height. It was a response to public outcry over the so-called "canyon effect" created when two skyscrapers were built directly across from each other, blocking sunlight and choking air flow. The new requirements attempted to ensure that air and light could reach the streets below even as the city became more and more vertical (Figs. 23–25). This was largely perceived as a public health issue — fresh air and sunlight were essential to ward off sickness. Though the Zoning Resolution was enacted in 1916, it was not until the early 1920s, after the end of World War I, that the building industry again picked up, requiring architects to rethink their approach to tall buildings.[35]

Figure 23. New York Zoning Laws of 1916 divided the city into zones that dictated how far a skyscraper had to set back from the street for every foot of vertical height.

New York Board of Estimate and Apportionment, Height District Map, Section 12, 1916. The Lionel Pincus and and Princess Firyal Map Division, The New York Public Library, Astor, Lenox & Tilden Foundations.

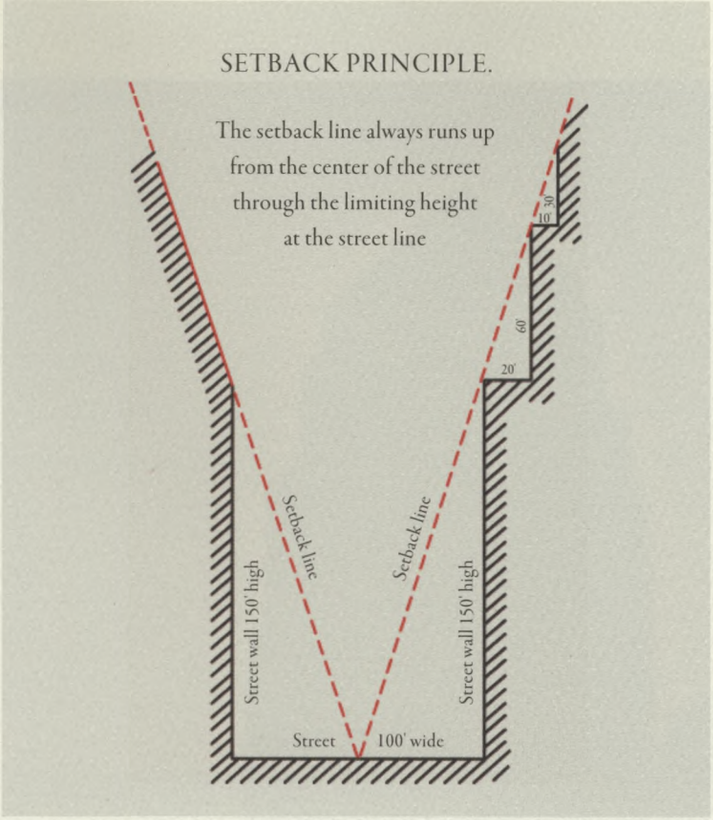


Figure 24. The zoning documents included diagrams suggesting the profile of buildings built under the new laws. Shown here is a diagram for a tower in a 1 ½ times district, showing a sloped profile on the left and a stepped profile on the right.

Diagram based on the New York Commission on Building Districts and Restrictions Final Report of 1916.

Figure 25. When the Equitable Building at 120 Broadway was completed in 1915, it sparked an outcry because of fear that its height and sheer face would block light and air from the street below.

Milstein Division of United States History, Local History & Genealogy, The New York Public Library, Astor, Lenox & Tilden Foundations.

In 1922 Hugh Ferriss published a series of dramatic, visionary drawings that suggested ways that architects could embrace the zoning requirements as a generator of new architectural form. In black charcoal, Ferriss depicted a city composed of crystalline and stepped masses, futuristic forms that, as Carol Willis has written, "gave the setback formula an almost iconic identity."[36] Though architects had been discussing how to respond to the new zoning requirements since the late teens, Ferriss's riveting drawings provided a catalyst for the transformation of skyscrapers in New York (Figs. 26–28).

Barclay-Vesey Telephone Building

Figures 26–28. Hugh Ferriss, Stages 1, 3 and 4 of the series of drawings "Study for Maximum Mass," 1922.
Cooper-Hewitt, National Design Museum, Smithsonian Institution / Art Resource, NY. Gift of Mrs. Hugh Ferriss.

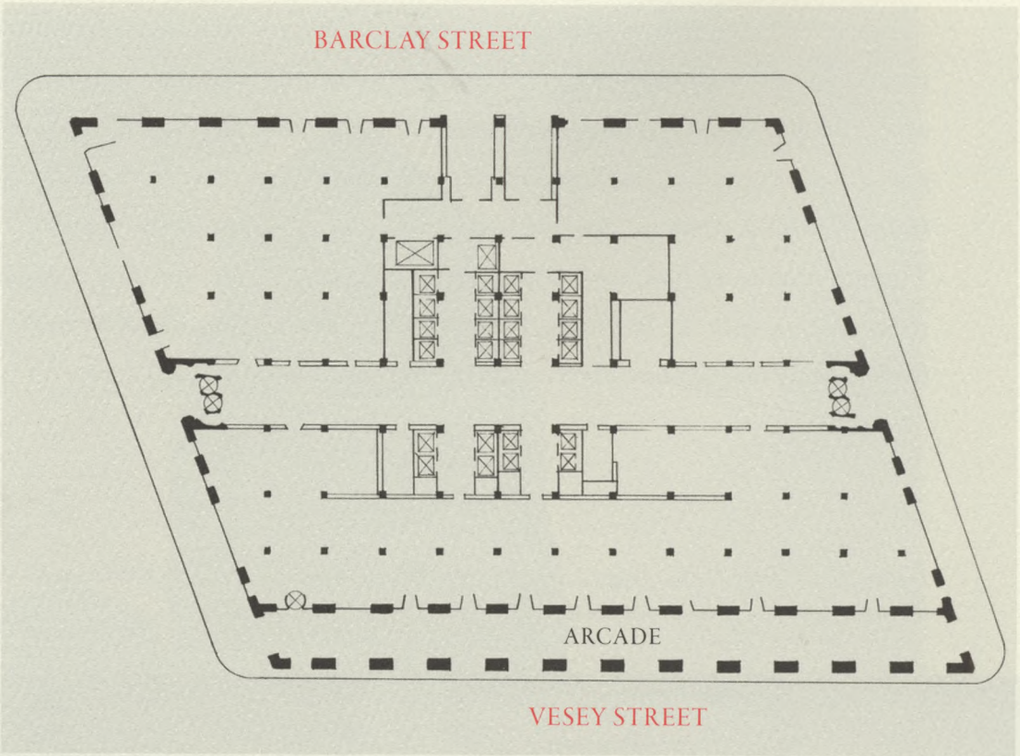
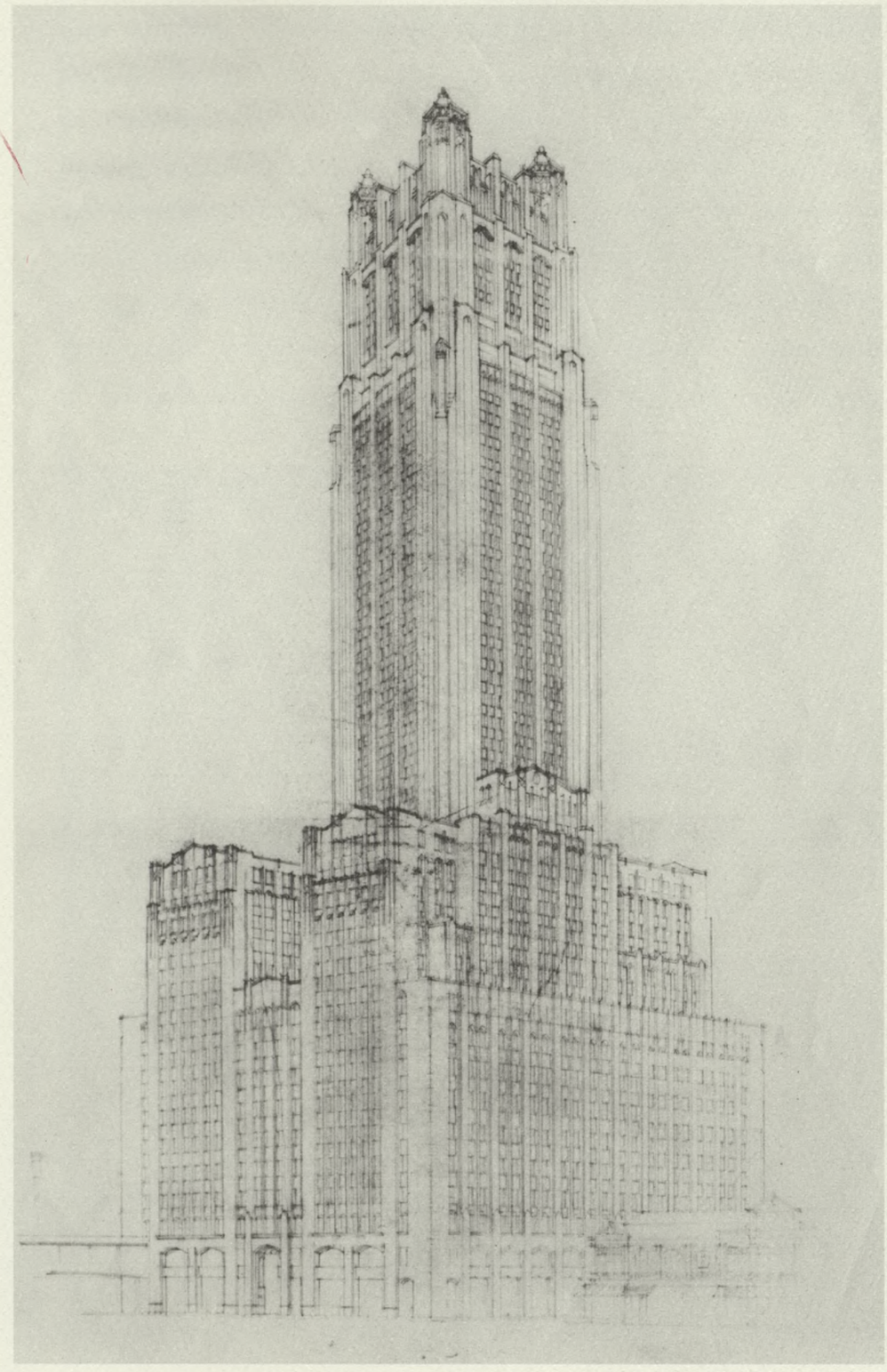


Figure 29.
Ground floor plan of the Barclay-Vesey Building. The difficult parallelogram-shaped site ultimately suggested the idea of two towers twisted against each other.
Ralph Walker, Architect *(1957).*

As Walker began work on the Barclay-Vesey Telephone Building, he had these images in his mind: the modernity of the telephone and the need for a modern skyscraper that responded to the new zoning law. The Barclay-Vesey Building's site was difficult, shaped like a parallelogram, and the building was to take up the entire city block, a nearly unprecedented scale, which presented a serious problem in an era when natural light from windows was an essential component of skyscraper design (Fig. 29). The core interior spaces of the massive building would obviously have no windows, making them useless for traditional office space. The design team thought constructively about this difficulty and ultimately decided to capitalize on the dark core by placing the telephone equipment within it. The surrounding layers and the towers above were to house windowed offices for telephone operators and the corporate staff. The next problem was how to integrate the two on such a tremendous scale.



Barclay-Vesey Telephone Building

Figure 30. Ralph Walker study for the Barclay-Vesey Telephone Building, 1922, pencil on tracing paper. Walker sketched many possibilities for the tower; this one was a tall, slender composition.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

Barclay-Vesey Telephone Building

Walker struggled at first, going through a series of studies showing a wide range of possibilities, from squat towers to tall slender towers (Figs. 30–31). The essential problem was the tension between the tower and the broad base. The solution Walker finally settled on embraced that tension. Rather than trying to make a seamless, stepped transition, as Ferriss's drawings suggested, Walker twisted a single tower against the massive base, escalating the tension between the two. The H-shaped slots that form a visual transition between the two suggest a building being carved away, its sheer surfaces cut cleanly along their edges. Rather than try to disguise the scale of the building, Walker emphasized it (Fig. 32).

Figure 31. Ralph Walker, study for the Barclay-Vesey Telephone Building, 1921, pencil on tracing paper. In other early studies, the tower was short and squat.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

Figure 32. Opposite: McKenzie, Voorhees & Gmelin, New York Telephone Building, also known as the Barclay-Vesey Telephone Building, 140 West Street, New York, 1921–26. The telephone company flag flies from the mast at the top of the building.

Photograph ca. 1926, Detroit Publishing Company Photograph Collection, LC-D41-4, Library of Congress.

PROVIDENCE LINE
Sozodont
Sozodont
BOWES GOLD STRIP CO.

Inside, the building housed a complex program of combined industrial and office spaces, refining and expanding the typology established forty years earlier at Cortlandt Street. On the one hand, the building housed equipment in the "plant" on floors 2 through 10 and was engineered with massive reinforced concrete floors to support the heavy wires and switching equipment that connected the telecommunications hub to the surrounding city. On the other, it housed people: the women who served as operators and provided directory assistance and the men who worked as engineers, maintaining and refining the equipment. In addition, since the Barclay-Vesey Building served as corporate headquarters, a staff of executives and secretaries needed to be accommodated. McKenzie, Voorhees & Gmelin developed a complex section that segregated the workforce by function and gender, with executives at the pinnacle, corporate staff (including departments like accounting and public relations) between floors 10 and 26, engineers in the "plant," and operators located largely on the fifth floor. The building had five sub-basements, including a men's locker room (the women's was higher up, on the mezzanine), and a windowless employee cafeteria brightened by Mediterranean decor. In its combination of industrial, technical, and corporate functions, the building was like a small city.[37]

Beyond sheer scale and complexity, it was Walker's subordination of ornament to the building's mass that made it remarkable (Figs. 33–36). The building's steel skeleton was clad in a nondescript buff brick from sidewalk to crown, relieved only by a series of carved limestone panels at the entrances and cast stone panels at the windows and upper parapets. The ornament was shallow relief, recessed into the wall plane, leaving the wall surfaces sheer as the eye moved upward. While the panels contained lush, Edenic images of grapes, vines, snails, birds, mountain lions, and even elephants, these images did not detract from the overall image of solidity. As Lewis Mumford wrote about this "rock garden:" "Here in all its main lines, is our present business regime — with no nonsense about it. What a relief to have no nonsense about it!"[38]

Barclay-Vesey Telephone Building

Figure 33. The upper tower of the Barclay-Vesey Building was refined by a combination of crystalline and organic forms, hard edges dissolved by elephant heads, fountains, sunflowers, and curling vines.

Courtesy HLW International LLP.

Barclay-Vesey Telephone Building

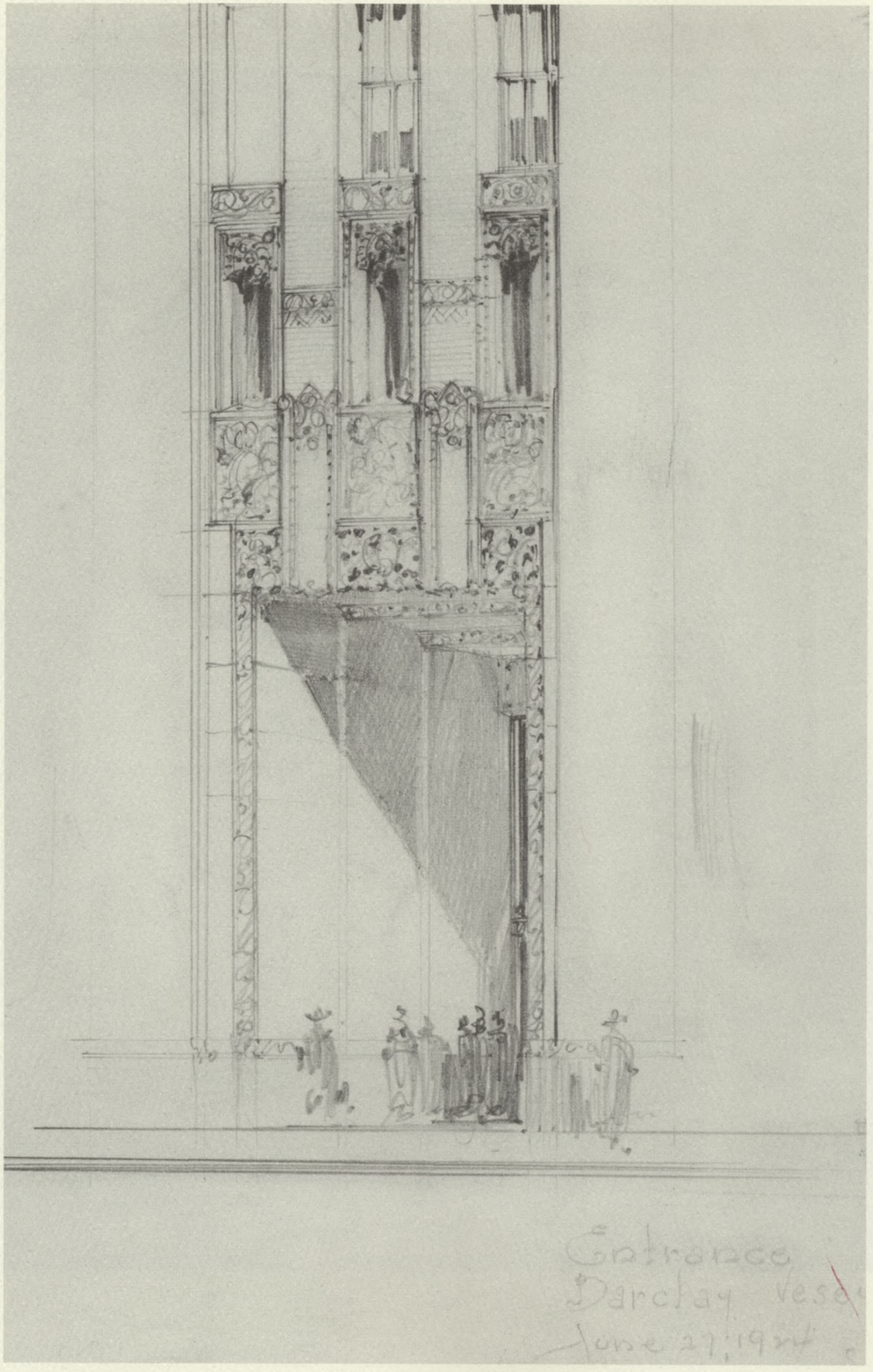


Figure 34. Ralph Walker, study for an entry to the Barclay-Vesey Telephone Building, pencil on tracing paper, 27 June 1924. In this sketch Walker focuses on the proportion of the entrance relative to the ornamental panels, windows, and crowds of people. The patterns of ornament would change by the final design.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

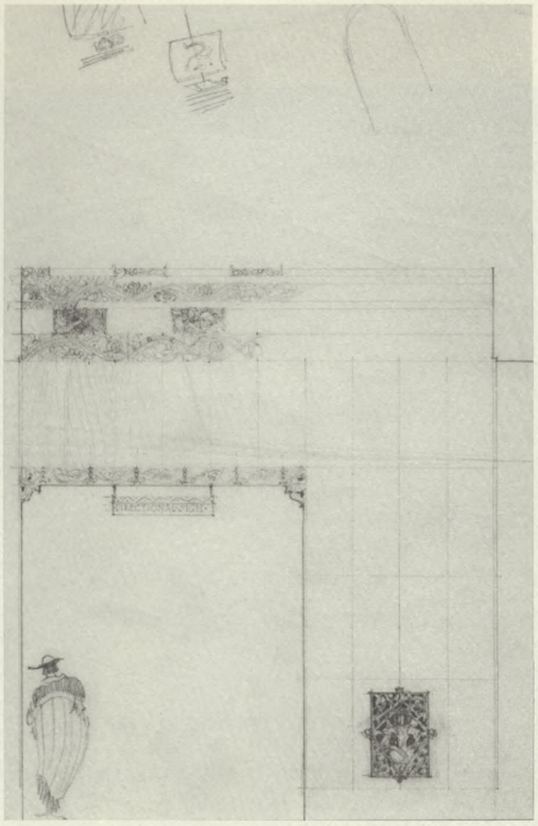


Figure 35. Ralph Walker, study for passageway at the Barclay-Vesey Telephone Building, ca. 1924, pencil on tracing paper. The drawing emphasizes the relationship of the cloaked human figure to the scale of the corridor and shows the beginnings of the ornamental panels.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

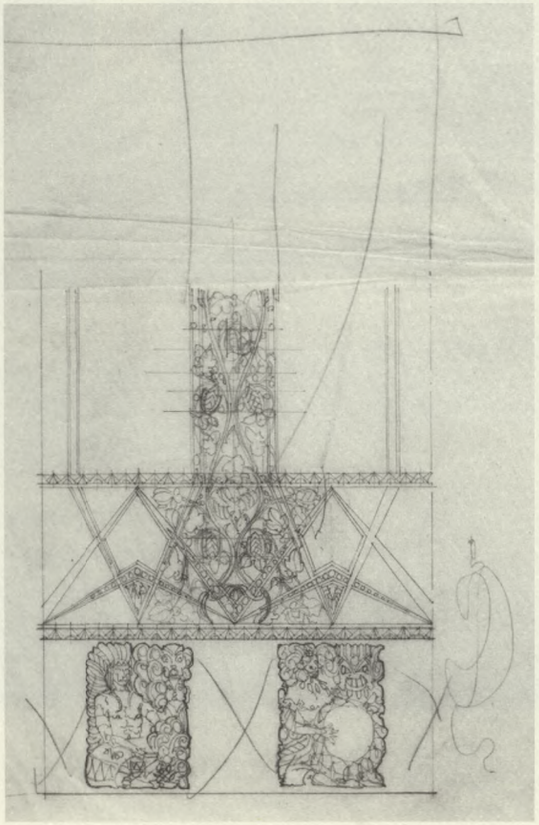


Figure 36. Ralph Walker, study for Native American figures in the lintels over the main entries at the Barclay-Vesey Telephone Building. The sharply angled chevrons and intertwining vine motifs are also emerging in this sketch, ca. 1924.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

Barclay-Vesey Telephone Building

This was a radical break from the historicizing architecture of previous decades. Again, Mumford captured its revolutionary qualities, the way it "cast off Gothic pinnacles, Romanesque entrances, or classic peristyles, and faces the world in the naked forms of its own day and place."[39] Many writers have assumed that Walker's ornamental schemes show the influence of the 1925 Paris *Exposition des Arts Décoratifs et Industriels Modernes*, now widely understood as one of the key catalysts in the Art Deco boom of the late 1920s.[40] But Walker's designs for the ornament of the Barclay-Vesey Building were finished before the exposition began. Instead, Walker drew on a variety of ornamental sources, both historical and contemporary: the vegetal patterns of Roman ornament, the curvilinear organic abstractions of Louis Sullivan, and the crystalline projections of Claude Bragdon.[41]

Walker was also committed to the creation of meaningful public space in the massive building. Along Vesey Street the building contained a covered pedestrian walkway, created as a compromise with the city, which took back property from the telephone company to widen the street. Walker envisioned the space as a shopping arcade, connecting the Barclay-Vesey Building to the Washington Market across the street (Fig. 37). The public corridors traversed the building from side to side, at one time allowing the public to cross through without having to go all the way around the block.

Figure 37. The arcade along Vesey Street, a civic gesture, gave covered public space to the city. The arcade is still accessible, but partially hidden behind the elevated pedestrian walkway that extends over West Street.

Photograph by Sigurd Fischer. Ralph Walker, Architect *(1957).*

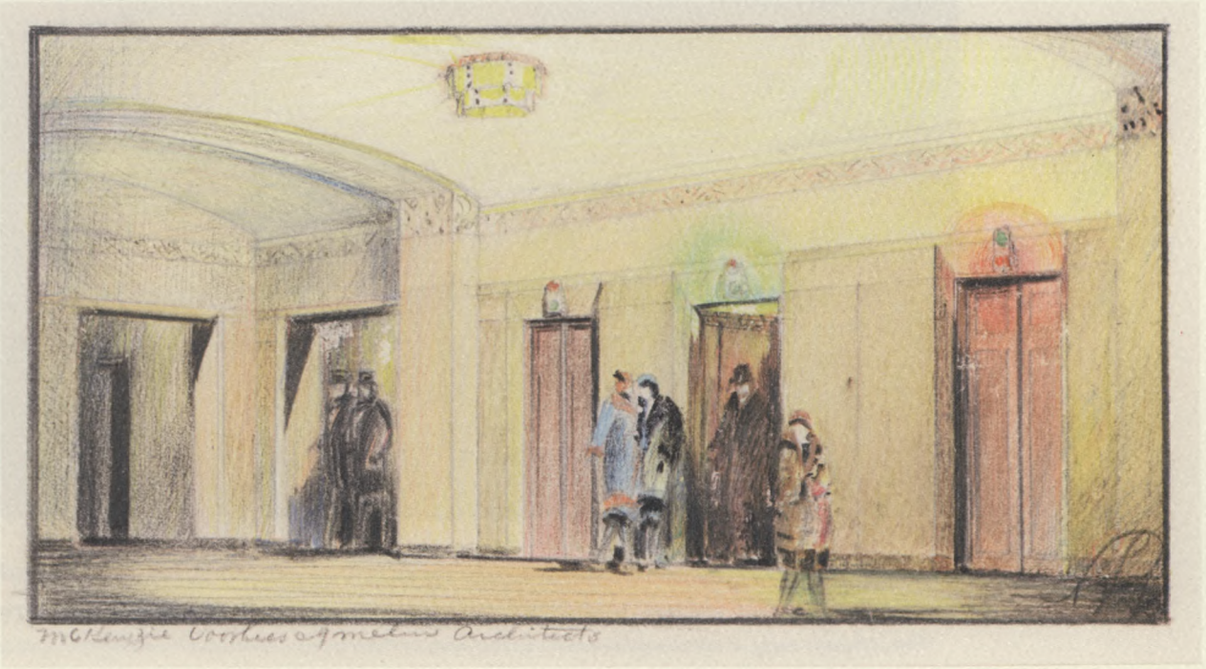
NCE LINE

Figure 38. Entrance lobby of the Barclay-Vesey Building. The main corridor cuts all the way through the building from Washington to West Street and is defined by rich panels of polychromed marble and travertine, brass accents and lighting fixtures, and a series of ceiling murals depicting scenes celebrating the history of human communication. EverGreene Architectural Arts restored the murals after they were damaged by the terrorist attack of September 11, 2001. Courtesy of Verizon.

Where the ornament of the exterior was restrained and monochromatic, the interior spaces exploded in a profusion of color and pattern. Murals by Edgar Williams of Mack, Jenney & Tyler adorned the ceiling, celebrating a theme that Walker claimed to have suggested to the telephone company: the history of human communication and the modern triumph of the telephone and radio. On the ceilings above the main corridors, inset panels showed West African drums, Native American smoke signals, an Egyptian megaphone, and medieval flag signals. At the center of it all was a telephone, surrounded by a brilliant sunburst, the apotheosis of modern technology (Figs. 38–43). In a nutshell, this was what the Barclay-Vesey building was about: the image of the telephone as the center of modern human experience.

Figure 39. Ralph Walker, sketch of the elevator lobby, emphasizing its bright, colorful, and fashionable ambience.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.



Barclay-Vesey Telephone Building

Figure 40. The entry from West Street is surrounded by brass, here with figures of dolphins and starfish around the doors and grape vines symbolizing interconnectivity. On the ceiling, the mural depicts West Africans using drums to communicate across long distances; eight other murals depict such scenes as ancient Romans using fire signals, Egyptian megaphones, and Aztec message runners. Courtesy of Verizon.

Figure 41. The central mural depicts the triumph of modern communication, with a single telephone surrounded by a sunburst linked by intertwining wires and bolts of electricity to a series of other telephones. The figures at top and bottom hold the bases of light fixtures that illuminate the lobby below. Hugo R. B. Newman is credited as the painter. Courtesy of Verizon.

Figure 42. Walker designed a series of brass lighting fixtures for the lobby that dramatized the nearly windowless space. Pendant fixtures hang from the ceiling and a series of lamps at the cornice lines were surrounded by gilded niches like stage lights, reflecting their warm glow. Courtesy of Verizon.

Figure 43. Furniture in the executive suites echoed the design of the building itself: the legs stepped back like the tower and the top rail is carved in patterns of vines. The chairs are still in use today.

Courtesy of Verizon.

Refining the Model

THE BARCLAY-VESEY BUILDING WON the Architectural League of New York's gold medal of honor in 1927 and ushered in a new period of creativity for Voorhees, Gmelin & Walker, as the firm was renamed in 1926 after the death of Andrew McKenzie. During the next 5 years they designed scores more buildings. Through the late 1920s, up until Voorhees, Gmelin & Walker's business came to a near standstill during the Great Depression, Walker experimented with the model he first defined at the Barclay-Vesey Building.

There were three interrelated themes in this experimentation: the meaning of the skyscraper in the modern city, the use of modern technology and materials, and the importance of ornament in design. Walker eventually merged these concerns under the heading of "humanism," a term he began to use by 1926 and which became the center of his design philosophy for the rest of his career. Walker was certainly neither the first nor the last to use the term "humanist" for architecture but he defined his personal use in distinct ways. Drawing inspiration from a diverse selection of contemporary cultural critics like Mumford, who became known for his "humanist" stance, and the New Humanists, a varied and often contentious group of academics dedicated to preserving the "great works" of the western tradition, Walker wrote about humanism as a means of moderating the impact of modern technology on people's daily lives.[42]

Walker, writing in 1930, considered the skyscraper to be the ultimate expression of the modern city: "The skyscraper . . . is the only means of living . . . in this age of the machine."[43] As a building type in its "infancy" the

Figure 44. Voorhees, Gmelin & Walker, Telephone Building on State Street, Syracuse, New York, 1930. The ornament here is clearly based on that developed at the Barclay-Vesey Building, showing cockatoos and owls among intertwined vines bearing grapes, berries, and flowers. Photograph by Kathryn E. Holliday, 2011.

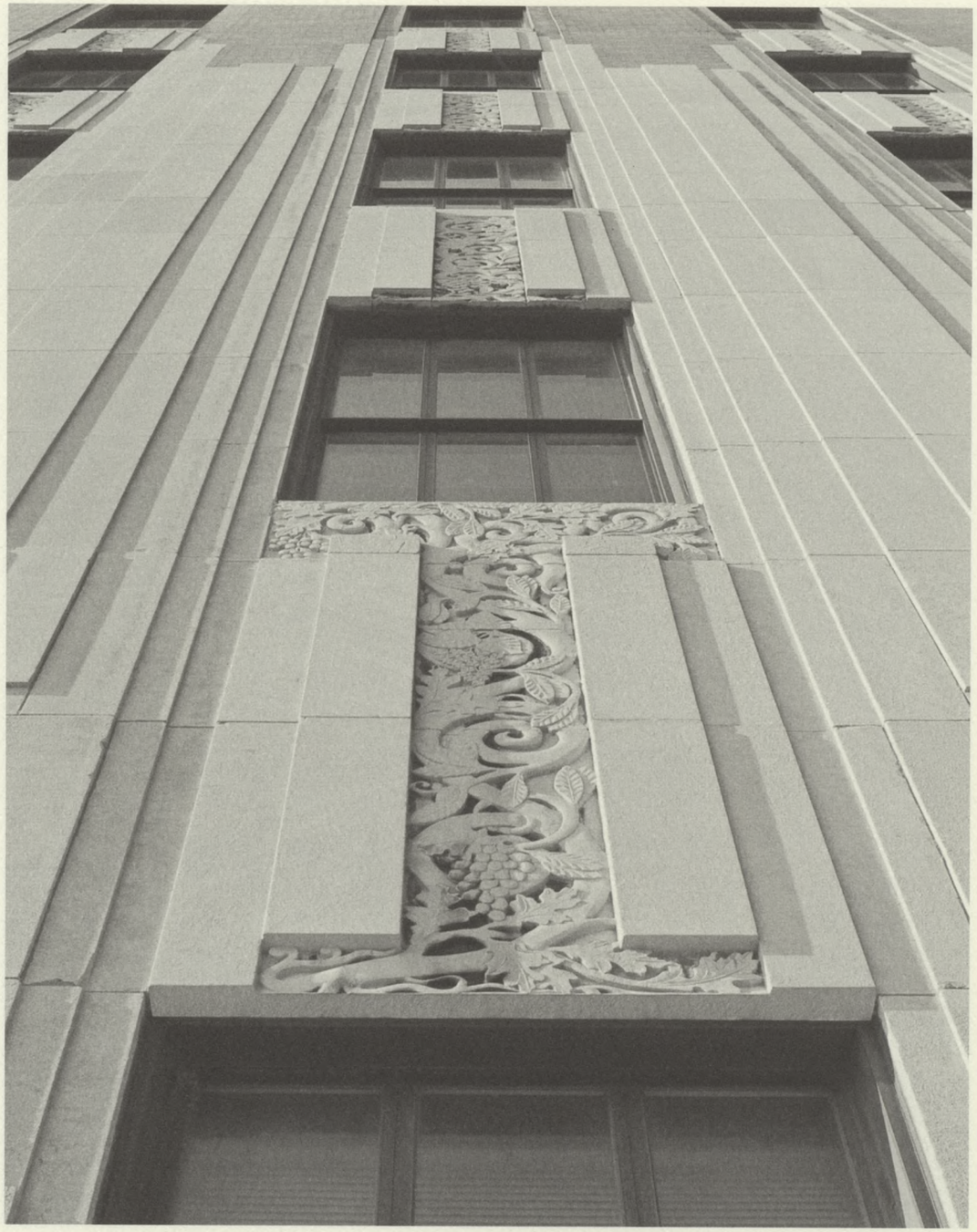


Figure 45. Voorhees, Gmelin & Walker, New York Telephone Building on Franklin Street, Buffalo, New York, 1930. Staggered cast stone panels pull the eye up the surface of the building.

Photograph by Kathryn E. Holliday, 2011.

skyscraper, he believed, brought together two types of problems: practical problems and problems of beauty. It was the latter problem that particularly vexed Walker in terms of modernism and urbanism. Buildings had to do more than just give people places to live and work — they needed to engage their emotions and senses: "Design is divided into two kinds. One kind is physical design, controlled by the necessities of the human body in its housing, and inspired by the desire to house it well and efficiently. The other kind is psychological, which design to my mind is very much more important . . . whether we call it beauty or mental comfort, things must be designed to please and entertain the mind."[44] Walker thus willingly pulled the building apart into two separate programs, one concerned with making the building function physically, and one concerned with making the building function "spiritually."

For Walker, the essence of humanism was this "spiritual" side of the building. Humanism issued from sculptural form and ornament and the visual delight it provided to city dwellers. On telephone buildings in Syracuse and Buffalo, sunflowers, vines, and birds intertwine with sharp-edged, angular, geometric motifs (Figs. 44–45). His ornament was monochromatic, always shallow relief in carved or cast stone — a newly available and relatively inexpensive material — with more costly metals such as brass concentrated around entrances.

Whereas most of the new setback buildings that followed the Barclay-Vesey Building stepped back in symmetrical, predictable rhythms, Walker used asymmetry and syncopation. Rapp & Rapp's Paramount Building in Times Square stepped upward regularly to a single focal point at its peak — the illuminated clock surmounted by an illuminated globe (Fig. 46). Ely Jacques Kahn's 2 Park Avenue also followed a pattern of symmetrical, regular setbacks, which provided a canvas for the abstract, brilliantly colored terra-cotta tiles that enlivened its surfaces (Fig. 47). By contrast, Walker used setbacks to create unpredictable contrasts in scale and texture, creating dramatically shadowed and theatrical urban tableaux intended to draw on people's visceral emotions.

Figure 46. Rapp & Rapp, Paramount Building, Broadway at 43rd Street, New York, 1926–27.

Photograph by Wurts Bros., 1927, Museum of the City of New York.

Figure 47. Ely Jacques Kahn, 2 Park Avenue, New York, 1926–28.

Photograph by Wurts Bros., 1927, Museum of the City of New York.

The Salvation Army Headquarters on Fourteenth Street tested the firm's ability to manage a complex program for a different kind of client. The Salvation Army first arrived in New York in 1880 and quickly established the concept of the "Cathedral of the Open Air," transforming streets and public spaces into its pulpit. By the 1920s, under the leadership of Evangeline Booth, the Army became well known for its humanitarian work, reaching out through both evangelism and charity. When it hired Voorhees, Gmelin & Walker in 1927, the Army was deeply concerned with creating a new symbol of its positive impact on the city while minimizing its costs.[45]

The new headquarters had a complex program, combining a hotel, or apartment residence for "girls" (the single women who formed the majority of the Army), national headquarters offices, an annex for printing Army materials, and a public auditorium for the screening of its films and presentation of plays.[46] The final design separates these functions into separate masses at varying scales. The tower of the apartments pushes upwards on Thirteenth Street behind the massive portal entrance to the theater on Fourteenth Street. Next to the theater rises another tower, this one housing the Army's office and print shop. The collection of towers repeated Walker's solution at Barclay-Vesey, creating a stepped composition, with transitions and edges softened by the use of cast stone and cast metal ornament (Figs. 48–49). The auditorium entrance provides the visual focal point. Cave-like and deeply recessed, the shadowed portal in the otherwise flat, planar surface of the building functioned as a beacon set into the long block between Sixth and Seventh Avenues. The portal's scalloped edges pulled people in from the street and were to be lit up brilliantly at night. As Chester Price's rendering makes clear, the idea was to animate the building, give it a rippling, flowing surface filled with the energy of the city.[47]

Just a few blocks away, off of Seventh Avenue and Eighteenth Street, the firm was also at work on a new building for the New York Telephone Company. Even with the monumental new infrastructure provided by the Barclay-Vesey Building,

Figure 48. Voorhees, Gmelin & Walker, Salvation Army National Headquarters Building, Fourteenth Street, New York, 1927–31. Rendering by Chester B. Price, 1928.

Dept. of Drawings & Archives, Avery Architectural and Fine Arts Library, Columbia University.

Figure 49. Salvation Army Building shortly after its completion. At left is the proscenium-entrance to the auditorium from Fourteenth Street. Courtesy Salvation Army National Archives.

the telephone company continued to expand. With the construction of the new Eighth Avenue subway beginning in 1925, the telephone company saw an opportunity to lay new subterranean lines and to create new exchanges in anticipation of increased population near the new subway stations.[48] District telephone buildings served many of the same functions as the enormous Barclay-Vesey Building but operated on a smaller scale, with individual buildings throughout the city handling telephone traffic for the surrounding neighborhoods. On the ground floor of the Eighteenth Street building, customers could pay bills and order services (though by the 1960s this was no longer the case); on the top floors, sales and accounting commanded the best views. The basement and lower floors housed the "plant," with the repair office located on floor four and operators on five. Directory information was higher in the building, on 12 and 13.[49] The placement of employees within the building reflected corporate hierarchies, with repairmen and operators occupying the lowest rungs and sales and management positions higher up.[50]

The Eighteenth Street building, as well as another new district building at Fiftieth Street and Ninth Avenue, developed from an amalgam of the Barclay-Vesey building with these newer experiments. On Eighteenth Street, carved panels of cast stone surround a dramatically angled arched entrance (Figs. 50–52). The original schemes, rendered by Chester Price, suggested that the asymmetrical tower might burst forth from the building like a shining, pointed star, but undoubtedly the telephone company's eye for economy pushed the design toward the still-dazzling zigzag crown. The entrances on Seventeenth and Eighteenth are on the cross streets, and from Seventh Avenue, as at the Salvation Army building, the exaggerated scale of the deeply recessed entry portal draws customers and employees to the building. Walker used the image of a theater proscenium to create the ornamental patterns in the buff brick, suggesting the folds of a stage curtain draped across the surface of the building. Entering was like being in a play, crossing the stage from one scene into another world.

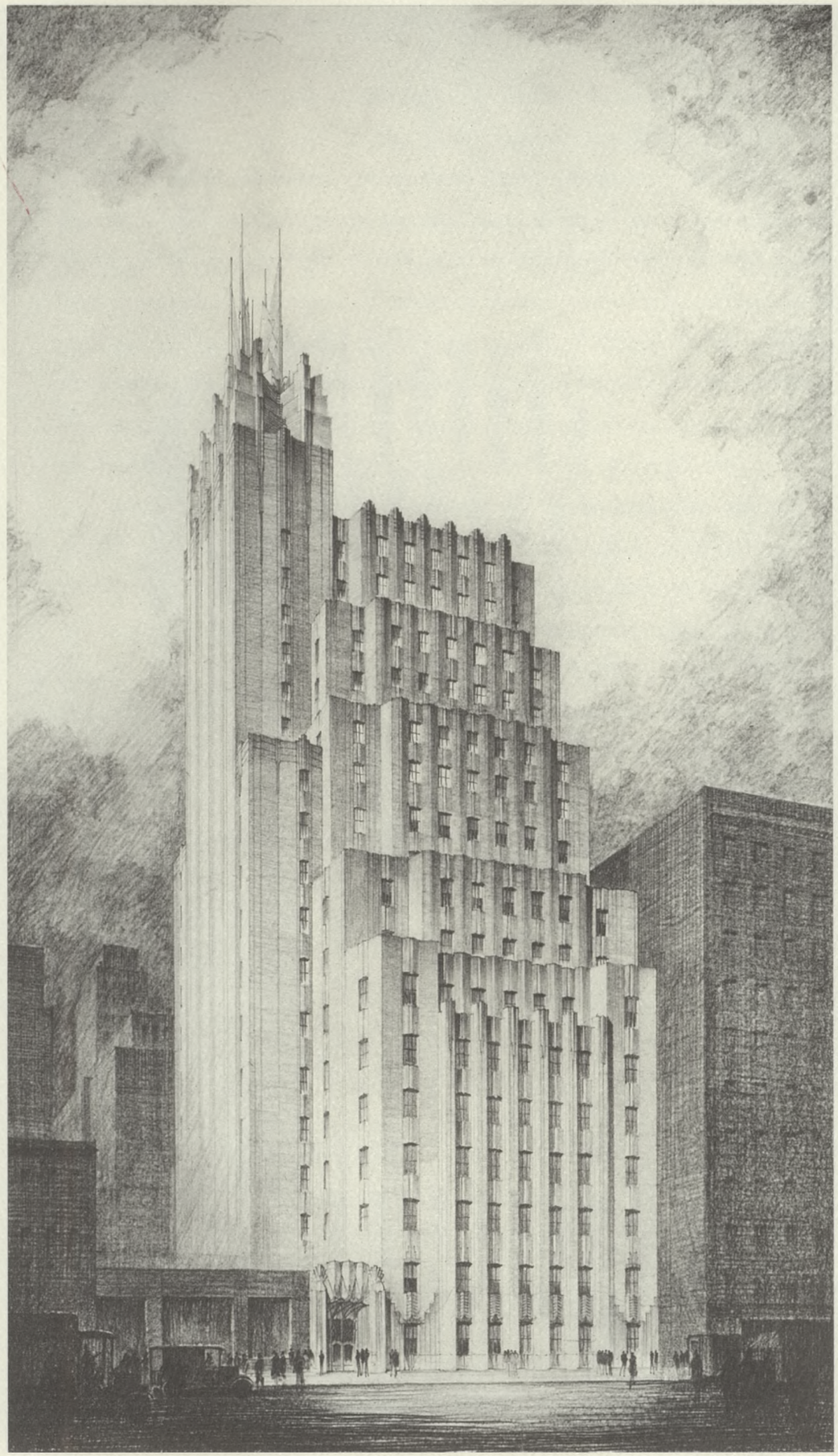
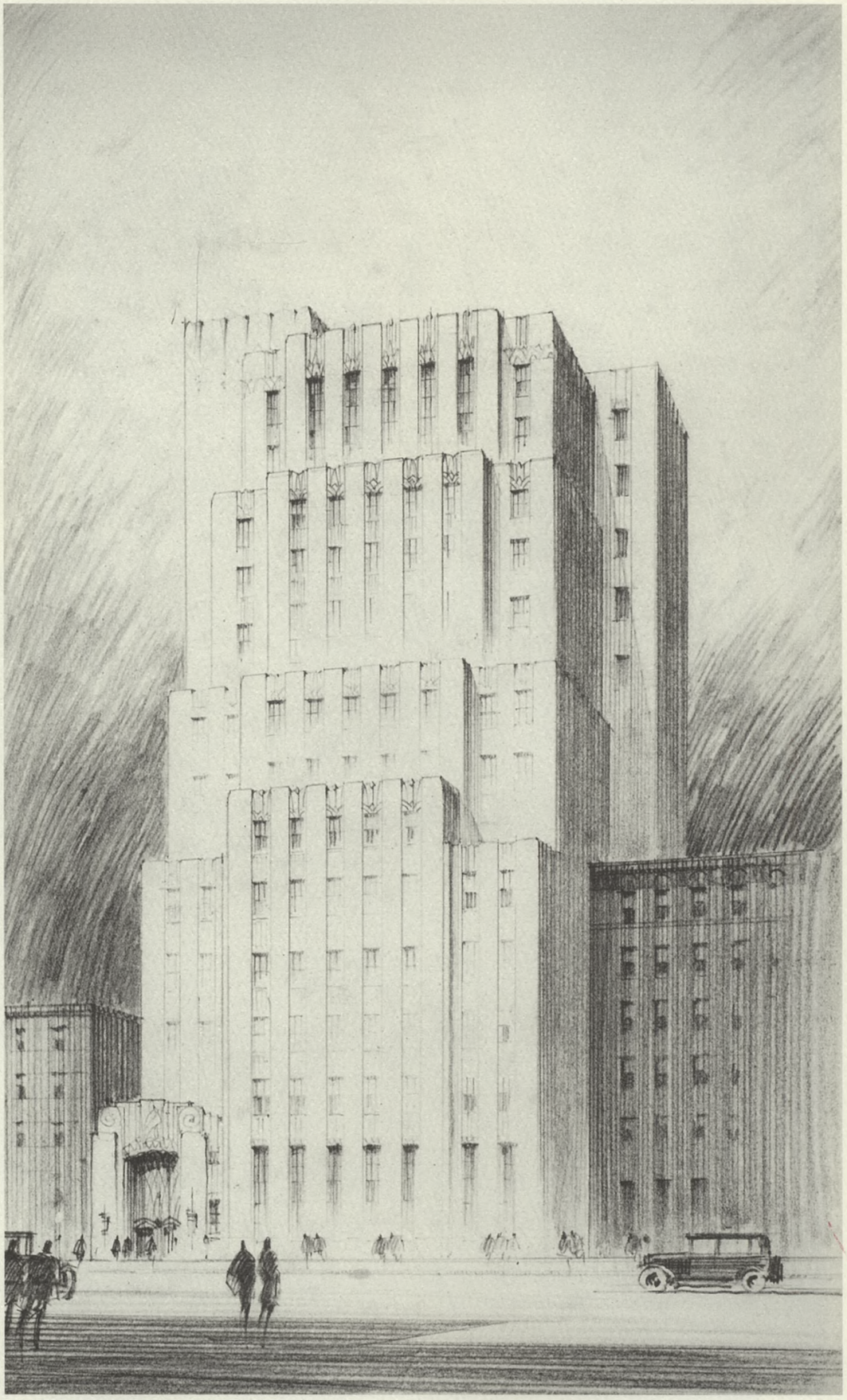


Figure 50. Opposite: Voorhees, Gmelin & Walker, West 18th Street Telephone Building, New York, just after its completion in 1931.

Photograph by Percy L. Sperr, 1931. Milstein Division of United States History, Local History & Genealogy, The New York Public Library, Astor, Lenox & Tilden Foundations.

Figure 51. West 18th Street Telephone Building, preliminary drawing by Chester B. Price; cameragraph by Palmer Shannon. This is the most ornate of three proposed schemes.

Courtesy HLW International LLP.



Theater was a long-time fascination for Walker. Since his student days at MIT, he admired the architect and theater designer Joseph Urban and by the 1920s, he could call him a colleague and friend. Designer of spectacular sets for the Ziegfeld Follies and the Metropolitan Opera, Urban was an innovator in the use of color and light to manipulate emotions. His belief that the spatial and ornamental experience of both the theater and of architecture could produce particular reactions in the viewer clearly informed Walker's writing about humanism.[51] In the facades of the Eighteenth Street telephone building, Walker took these connections between theatrical experience and architectural experience literally, hoping to produce a meaningful, "spiritual" city.

Materials played an equally important role in this humanist experiment. Nearly all of the 1920s towers were clad in brick, an economical and humble material. Most of Voorhees, Gmelin & Walker's clients favored brick because it kept costs down. But Walker still wanted the material to speak, to become a part of the larger "humanized" palette of the building. At the Western Union building, nineteen colors of brick created patterns in the building's surface, starting with dark red at the base and gradually becoming lighter as the building rose. Though today the colors are obscured by decades of grime, it remains an awe-inspiring design, resembling a mountain peak in the city, its portals folded like origami (Figs. 53–56).

Figure 52. West 18th Street Telephone Building, preliminary drawing by Chester B. Price; cameragraph by Palmer Shannon. A more restrained proposal.

Courtesy HLW International LLP.

Figure 53. Opposite: Voorhees, Gmelin & Walker, Western Union Building, 60 Hudson Street, New York, 1928–30. The Western Union building used nineteen colors of brick to create folded, origami-like patterns on the surface of the building. Photograph by Wurts Bros., 1930, Museum of the City of New York.

Figure 54. Western Union Building presentation board. Painted by Chester B. Price. Price's rendering shows the original fade from deep red at the base to pink at the building's crown.

Dept. of Drawings & Archives, Avery Architectural and Fine Arts Library, Columbia University.

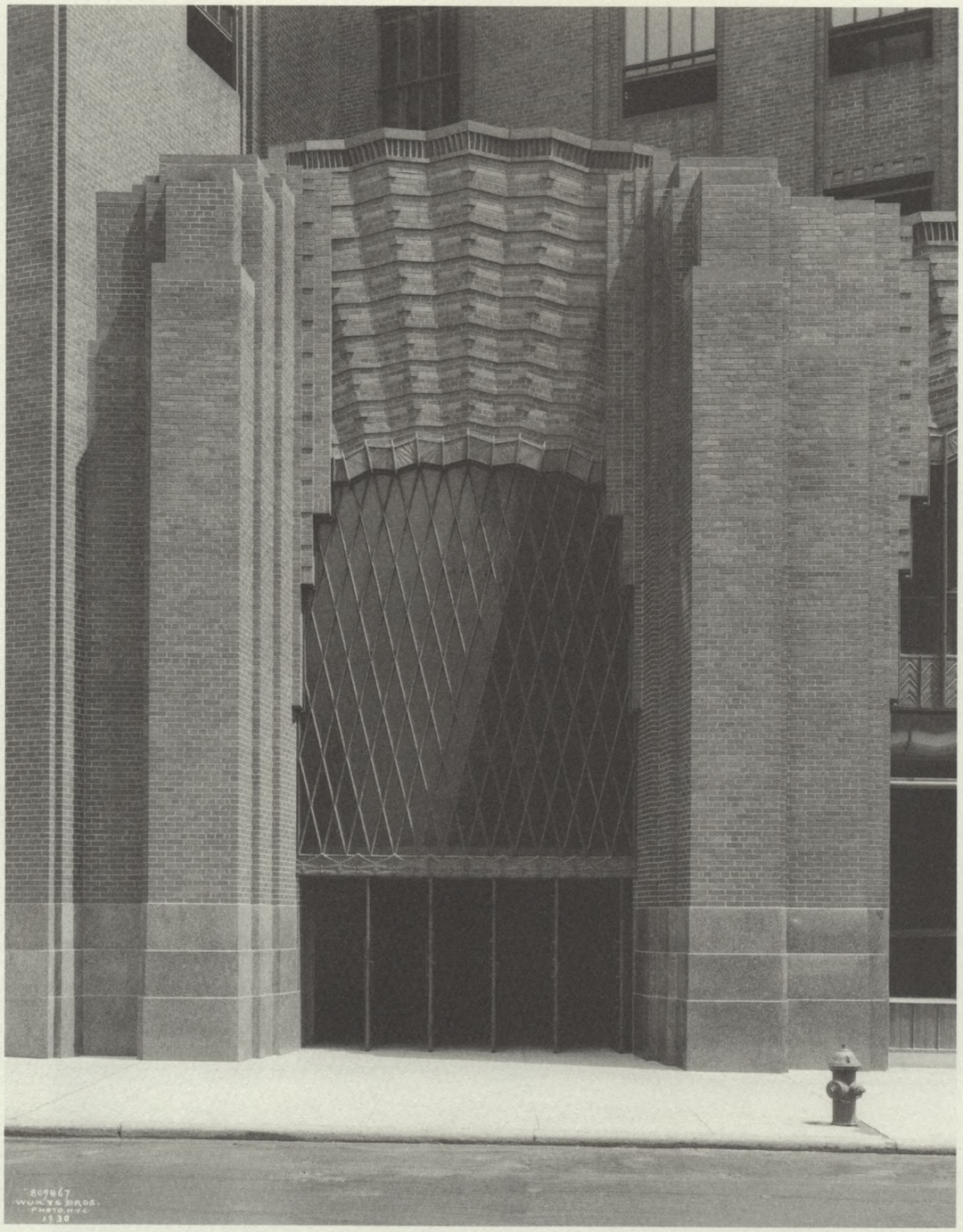


Figure 55. Entrance to the Western Union building from Hudson Street. The most elaborate brick patterns are located around the entrances. Photograph by Wurts Bros., 1930, Museum of the City of New York.

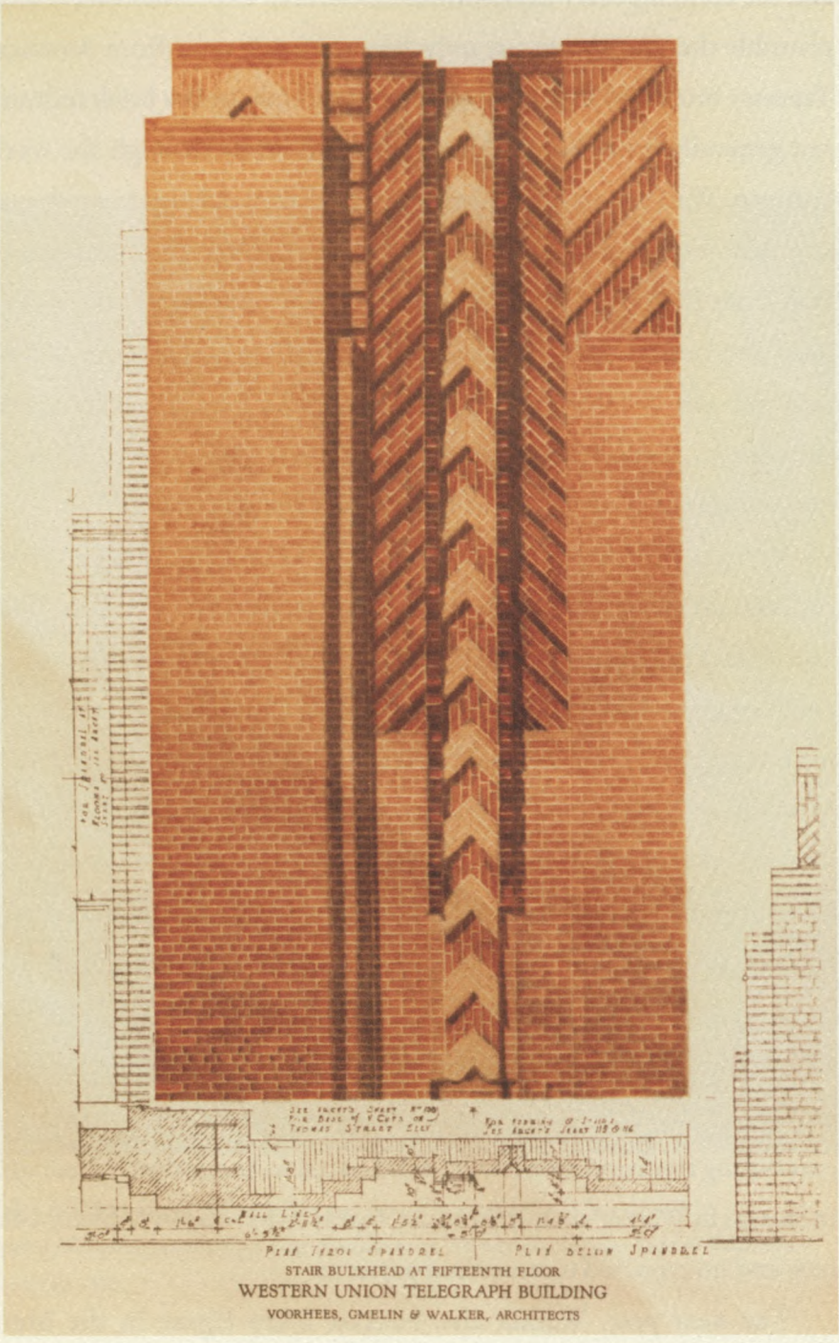


Figure 56. Western Union Building, detail drawing for the fifteenth floor stair tower showing the use of color and pattern. *Frontispiece to* Architectural Record *66 (July 1929).*

While scholars have suggested links between these sculptural brick patterns and the contemporary explorations of German Expressionism, it seems equally plausible that the idea to use polychromed brick came from American sources. Tapestry brick had long been promoted directly by the brick industry (though not generally for office buildings) and indirectly through the work of Louis Sullivan. Walker and his design associate Edgar Albright saw the use of brick as a manifestation of American handicraft; Albright, who worked with the firm from 1929 until 1934, stressed the "collaboration of architect with craftsman" as a central concern in the design, recalling the idealism of the American arts and crafts ideology.[52] Walker remained a passionate advocate for brick throughout his career, promoting his continued preference for masonry over increasingly popular glass curtain walls as late as 1956.[53]

By the end of the 1920s, Voorhees, Gmelin & Walker also began to experiment with metal, with more elaborate designs for grilles, light fixtures, and radiators becoming integral parts of a building's interior. Walker's collaborations with manufacturers intensified as he began to show his designs for home furnishings in collaboration with Macy's and with the Metropolitan Museum of Art's industrial design exhibits. In 1928, Walker was part of an international group of architects who designed interiors that were displayed in the Macy's department store in New York. Walker's luxurious design for an office appeared alongside interiors designed and furnished by Josef Hoffmann of Vienna, Kem Weber and Bruno Paul of Germany, and Gio Ponti of Italy (Fig. 57). Walker's office boasted a remarkable basketweave pattern in the tented ceiling and featured a dramatic mural as its focal point. The furniture was eclectic, combining traditional lines with bold patterns and industrial metals. The goal in this, as in Walker's other interiors, seems to have been to blend comfort with new and unexpected textures and patterns.

The next year, Walker also became a key figure in the Metropolitan Museum's industrial arts exhibits. Under the leadership of curator Richard Bach, the Eleventh Exhibition of American Industrial Art (1929) highlighted

Figure 57. Ralph Walker's design for an office was part of an exhibit at Macy's in 1928 where it appeared alongside interiors by Josef Hoffmann of Vienna and Bruno Paul of Germany.

American Architect *(20 June 1928).*

A MAN'S STUDY FOR A COUNTRY HOUSE,
Designed by Ralph T. Walker.

Figure 58. Walker designed a man's study for a country house for the Metropolitan Museum's 1929 industrial arts exhibition. Walker designed the space in addition to choosing (and in some cases designing) the furnishings.

Magazine clipping, BNY Mellon Archives.

a new approach that positioned architects as the designers of modern decorative arts. Believing that American industry was too conservative, still focused on fussy period reproductions, Bach turned to Walker, Urban, Hood, and other members of New York's Architectural League to design rooms and furnishings that expressed the modern age. Walker provided the entire design for a man's study, creating furniture and accessories, like a complete cocktail service, in addition to designing the space (Figs. 58–59). Walker's forays into product design for domestic spaces continued in 1933 with the Macy's Forward House program, co-sponsored by *Architectural Forum*. The exhibit highlighted work

Figure 59. Cocktail service designed by Walker and produced by Charles David Graff, 1929. This cocktail service can be seen on the table in the man's study in the adjacent figure.

Yale University Art Gallery, M. Josephine Dial in memory of Gregory T. Dial, B.S. 1930.

Figure 60. Voorhees, Gmelin & Walker, Genesee Valley Trust Building, also known as the Times Square Building, Times Square, Rochester, New York, 1929–30. Photograph by Kathryn E. Holliday, 2011.

by Walker, Hood, Urban, and Kahn and showed the "men who created New York's skyline" designing for the domestic realm. Walker's upscale "Hospitality House," where "cocktails and highballs can be mixed without riling the cook," drew on the same ideas as his skyscrapers, with custom-designed furnishings like ash trays and desk lamps providing the finishing touches.[54]

Throughout the 1920s and into the early 1930s, Walker applied his increasingly rich palette of industrial design, incised ornament in cast stone, asymmetrical mass, and rippled brick surfaces to buildings across the city and state. Essential to these experiments was a deeply held belief that these formal, visual gestures had *meaning* — Walker developed a distinct visual style not just as evidence of "creative individualism," to use his phrase, but as an attempt to create a broader humanist modern architecture.[55] Nowhere was this convergence of creativity and metaphor more apparent than in his design for the Times Tower in Rochester, New York, originally built as the headquarters of the Genesee Valley Trust bank (Figs. 60–61). Nicknamed the "Wings of Progress," the building has it all: an asymmetrical tower, stone reliefs by the sculptor Leo Friedlander depicting the first settlement of the Genesee Valley, and fluted, rippling surfaces that draw the eye upward. Atop the entire mass of the building rise four aluminum wings, extending the building's reach upward into the sky.[56]

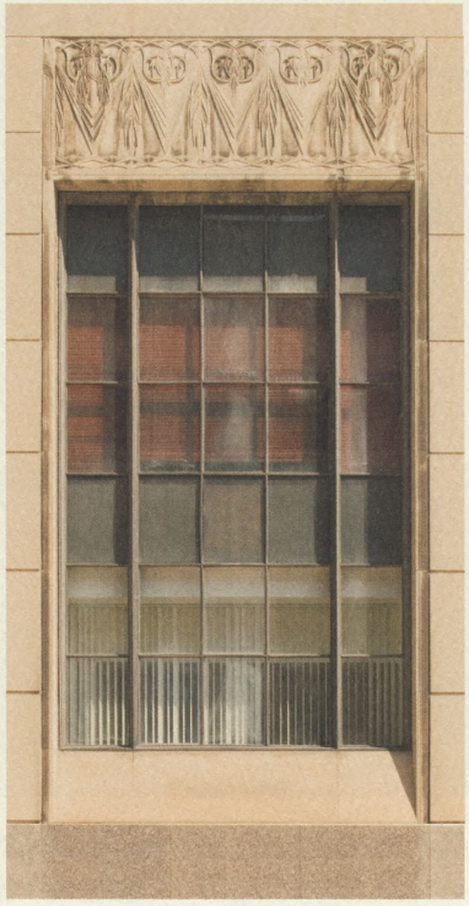


Figure 61. Genesee Valley Trust Building, window facing W. Broad Street.

Photograph by Kathryn E. Holliday, 2011.

One Wall Street

THE CULMINATION OF THIS DECADE of exploration was the design of One Wall Street, the headquarters of the Irving Trust Company. Located at the heart of New York's financial district, at the intersection of Wall Street and Broadway across from Richard Upjohn's Trinity Church, the Irving Trust Building (1928–31) presented Walker with an ideal client — one with a large budget and an interest in public extravagance (Fig. 62).

The Irving Trust spent several months assembling the necessary real estate to secure the prestigious address, acquiring one small piece at a time using a series of anonymous buyers to try to keep the nature of the transactions secret and prevent price escalations. The final piece of the real estate puzzle was the purchase of the "Chimney Building," a delightfully tall, skinny structure at the intersection of Broadway and Wall. The Irving Trust paid a record price for the building, generating headlines declaring it the "world's costliest realty plot."[57] The new building, therefore, had to match the value of the real estate in its splendor and prestige. Walker, for the first time, had a client that actually wanted opulence.

Anecdote suggests that it was Walker who won the commission for Voorhees, Gmelin & Walker. The bank's president, Lewis Pierson, had initially intended to hire Cass Gilbert, the designer of the iconic Woolworth Building (1913), where the Irving Trust had its headquarters between 1913 and 1931.[58] But Pierson apparently liked the way Walker talked about architecture and its larger meaning and decided to take a risk on a young, "modern" designer. Walker, Stephen Voorhees, and Everett Meeks, dean of the art school at Yale, accompanied by Pierson and the Trust's directors embarked on a tour of banks throughout the country, seeing what was best, and worst, about the latest designs.[59]

Figure 62. Voorhees, Gmelin & Walker, Irving Trust Building (today BNY Mellon), One Wall Street, New York, 1928–31. Viewed from the churchyard of Richard Upjohn's Trinity Church (1843–46). *Photograph © Norman McGrath, 2000.*

Figure 63. Wall Street entrance to the Irving Trust Building. Photograph by F. S. Lincoln. Courtesy HLW International LLP.

What developed was the finest design of Walker's career. The Irving Trust occupied eighteen floors of the completed 48-story building, controlling its base and the top four floors, which housed an observation lounge and executive dining rooms. The remaining floors were rented largely to lawyers and financial firms.[60] The Irving Trust remained in the building until it was taken over by the Bank of New York in 1988; today it is the headquarters of BNY Mellon. The building provided numerous services in-house to accommodate its well-heeled clients: it had its own subterranean entrance to the subway, no longer accessible, as well as barbershops and cafés. Walker and his design team approached the Irving Trust as a centerpiece of urban experience, a hub for customers' and employees' relationships with the surrounding urban fabric.

Walker explored the form of the curtain wall in both its literal and its metaphorical sense. In the telephone buildings, Walker used ingeniously devised patterns of brick to suggest fluting and folding and to disguise the horizontal effects of the courses of mortar. At One Wall Street, Walker used limestone cladding, which was far more expensive than brick, but which allowed a more subtle suggestion of the folds of curtains, a deliberately playful take on curtain wall construction. The architects collaborated closely with the building contractors, Marc Eidlitz & Son, to develop an efficient system for mounting the curved limestone panels on the rigid steel frame.[61] Marc Eidlitz (1826–92) was brother to Leopold, and the construction firm he founded was a long-term collaborator with Voorhees, Gmelin & Walker.

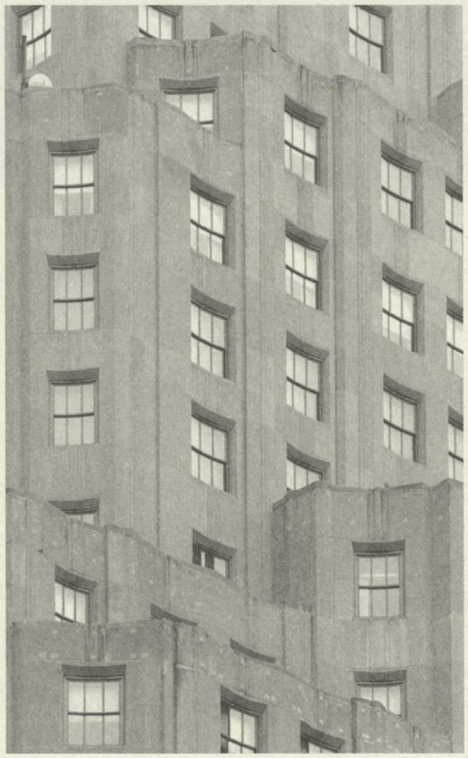


Figure 64. Irving Trust Building, chamfered corner facing the intersection of Wall Street and Broadway.

Photograph by Kathryn E. Holliday, 2008.

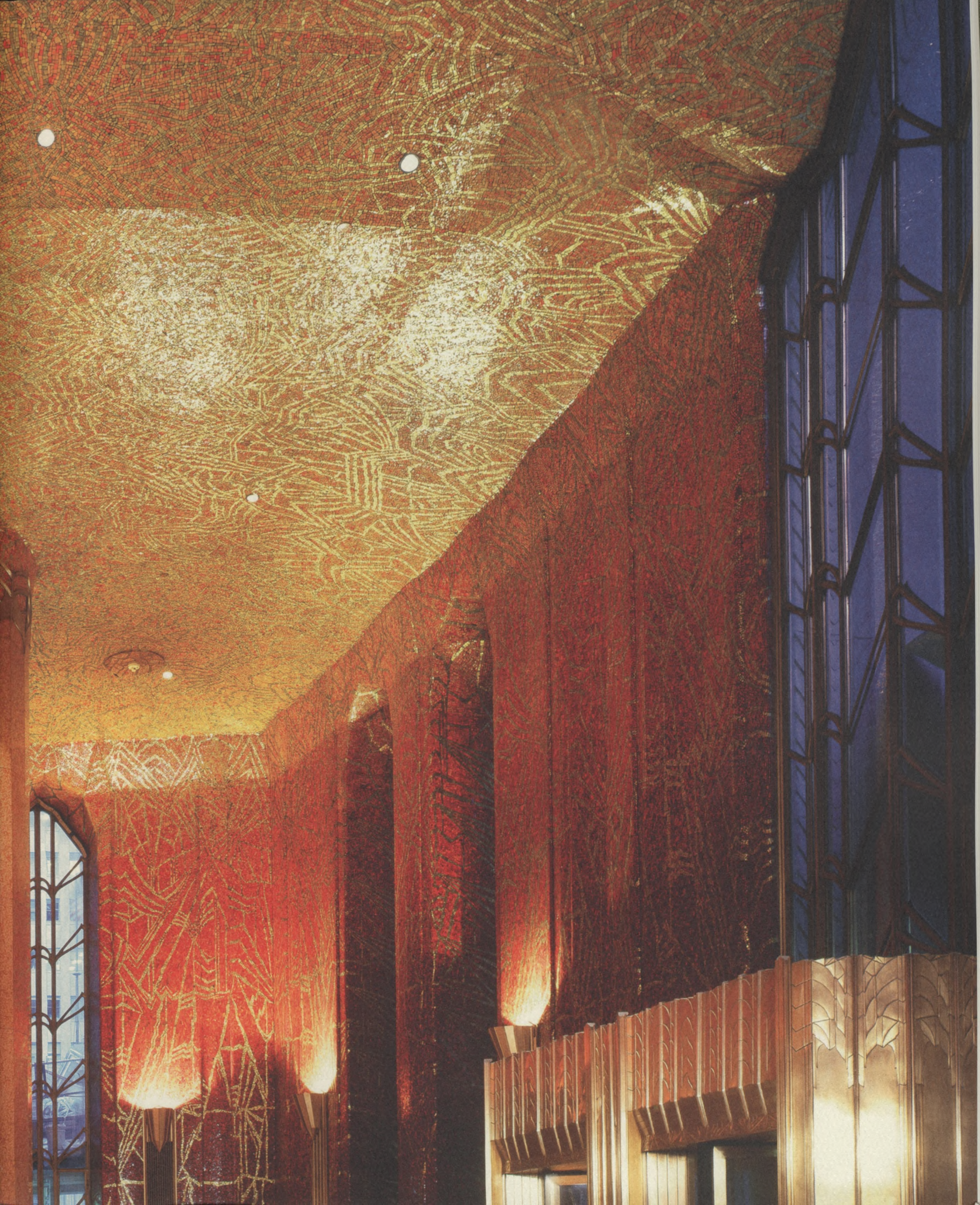
As a result, the limestone cladding is smooth, its continuous panels incised with repeating patterns of chevrons that draw the eye upward. Even the metal window frames folded to follow the ripples of the curtain wall. As it rises upwards, the building is broken into sections, stacked irregularly to frame and emphasize the main upward rise of the central tower. From the exterior, the building, despite its incised texture, is almost severe in its grandeur (Figs. 63–64).

The curtain wall metaphor extended beyond the dramatic portals and into the interior spaces as well. For the main public reception hall that allowed entrance from Wall Street, the bank's directors specifically asked for a space that would be "inviting and friendly" to its customers and lack the "over-impressive" qualities of other bank halls, with their classically-inspired white marble and columns (Figs. 65–66).[62] The "Red Room," as it has come to be called, is one of the most spectacular interior spaces in New York. The Red Room's design was managed by Perry Coke Smith, Walker's assistant, and Hildreth Meière, an accomplished mosaicist. Meière was a specialist in collaborating with architects, someone who had an innate understanding of the relationship between architectural space and mosaic surfaces. Walker admired her tremendously, writing "I'd much prefer to work with Miss Meière than with any artist I know."[63] In her work at the Nebraska State Capitol, for example, Meière's mosaics subdivide and scale the vast surfaces of the Senate Chamber dome, making the space warmer; her mosaics for the foyer floor break the enormous corridor down into a more intimate procession.[64] Her sense of color and expertise with the craft of mosaic are the keys to the success of the Red Room. Its walls are covered in irregularly shaped shards of mosaic tiles, deep red at the base and lightening to a tangerine orange at the ceiling — an effect used at exactly the same moment in the bricks of the Western Union Building. A pattern of gold tiles suggesting Gothic window tracery divides the surface, echoing the view through the room's windows of Trinity Church across the street. The resulting space is at once dazzling and otherworldly, suffused with the rich, warm glow of a secular Gothic chapel.

Figure 65. Hildreth Meière worked with the Ravenna Mosaics Company in Berlin to produce the irregular shapes of the mosaic tiles and their subtle gradations of color. The room's fittings, designed by Walker's team, were all highly polished brass. Photograph © Norman McGrath, 2000.

Figure 66. Overleaf: The "Red Room" of the Irving Trust, originally designed to be the bank's public reception room. Walker, P. C. Smith, and Hildreth Meière collaborated to produce this masterpiece of art deco design.

Photograph © Norman McGrath, 2000.



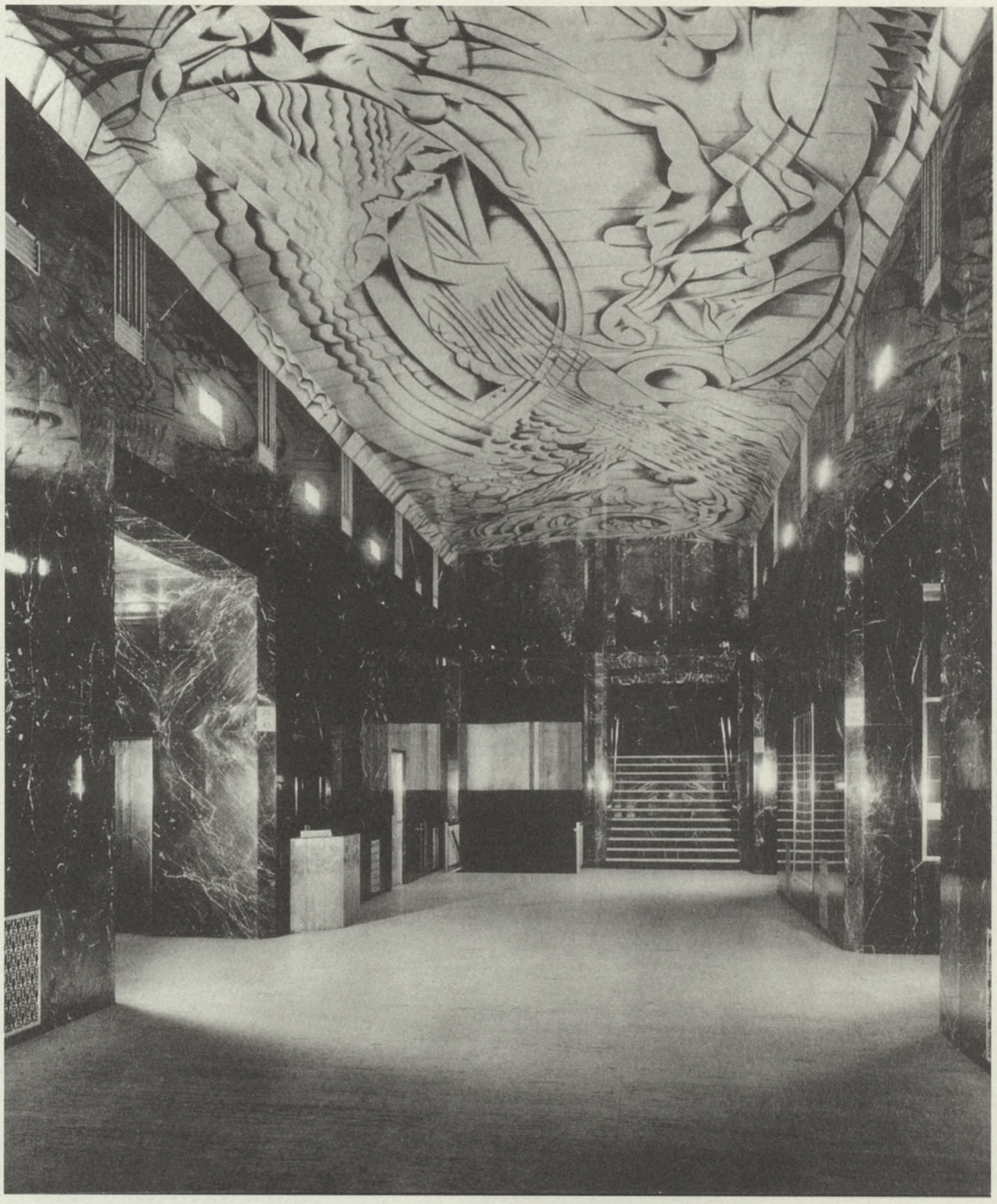


Figure 67. The Irving Trust's elevator lobby with ceiling mural in silver leaf by Hildreth Meière with Kimon Nicolaides. The mural, now lost, was titled "The Only Reason for Wealth Is the Attainment of Beauty."

Photograph by Ira Wright Martin. Courtesy HLW International LLP.

Writing about the Irving Trust's stunning entrance lobby, architecture critic Eugene Clute described Walker's strategy: "It was recognized from the outset that a room in a modern steel-frame building is only a cage set within the frame of the building and finished with a lining that has no more structural significance than the lining of my lady's work basket. Such a room is not a box with a lid, as the old rooms were. The ceiling may well be regarded as a canopy and the walls as curtains."[65] The "linings" of the building, appropriately conceived of again as textile in nature, could therefore be treated separately, as individual cells with distinct moods.

The elevator lobby and hallways beyond the Red Room thus changed palette, to black and silver, and mood. The ceiling of the hallway was covered in a mosaic by Meière entitled "The Only Reason for Wealth Is the Attainment of Beauty," a stunning composition that reflects the influence of Expressionism and Futurism, showing arched, straining bodies, arms outstretched, striving for an unseen goal (Figs. 67–68). Meière suggested in an essay that the composition moves from figures striving for a "living wage," who, sparked by "Ambition," become those who attain "Big Money."[66] The theme is movement and progress, mirroring the movement of employees through the halls, into the elevators, and on to their work for the day. Sadly, today these murals are lost, hidden, perhaps, behind air-conditioning ductwork.

Figure 68. Hildreth Meière's preparatory drawing for the elevator lobby mural, which clarifies the relationship of the arching figures to the rectangular frame. Courtesy HLW International LLP.

Figure 69. The top floor of the Irving Trust is a private observation lounge. This view shows the original furnishings and curtains, which dramatically framed the views of the city below. The faceted ceiling is covered in thousands of opalescent kappa shells.

Photograph by Nyholm-Lincoln. Courtesy HLW International LLP.

Figure 70. The observation lounge walls were originally covered in a red and buff "war bonnet" print.

Photograph by Nyholm-Lincoln. Courtesy HLW International LLP.

Drawing on the increasing professionalization of interior design in America, Voorhees, Gmelin & Walker officially established a department of interior design within the firm in the late 1920s. The department's specific mission was to "humanize the work of the architectural designer."[67] Specializing in furniture groupings, room palettes, material textures, and lighting, the firm's interior designers became active participants in the design process by insuring that the building's interior surfaces were in harmony with its overall character. The Irving Trust benefited from the new department and from Walker's involvement in the Macy's and Met exhibitions on modern interiors.

At the building's crown, the observation lounge provides spectacular views of the surrounding city for executives and their invited guests (Fig. 69–70). The faceted ceiling is covered in luminescent pearly shells, identified as Polynesian kappa shells. By contrast, the walls were originally covered in fabric printed in an abstract red and gray "war bonnet motif" based on Native American feathered headdresses, now removed and replaced with monochromatic buff linen. It is possible that Meière's experience researching the material culture of Native Americans for her work in Nebraska supplied some of the inspiration for the motif. The enormous windows, oriented to the cardinal points and designed specifically to allow views of the peaks of the surrounding skyscraper city, were draped with statuesque curtains, directly suggesting the theatricality of urban life itself.

In the executive offices and meeting rooms, the folds of fabric were evoked through veneers of wood (Figs. 71–72). The executive board room's ceiling was beveled and covered in gold leaf. Again, the non-structural aspect of the veneer, negating and hiding the structure of the wall, was an explicit goal of the work: "The woodwork is used in its true character, as a mere lining or veneer upon the walls without pretense of any non-existent structural character; there are no columns, pilasters or cornices and since this work is not framed together, there are not even the usual rails, stiles, and panels, or suggestions of them. The construction, which finds direct expression in the design, is

Figure 71. The patterns on the building's exterior limestone curtain walls continued in the offices inside. This meeting room's walls are covered in rippling panels of mahogany and yuba wood. Courtesy HLW International LLP.

Figure 72. Voorhees, Gmelin & Walker's new interior design department handled furnishing the offices. The fittings, such as light fixtures and ventilation grilles, were designed by Walker's team.

Courtesy HLP International LLP.

essentially modern."[68] New technologies eliminated the need for traditional framing and plankwork and allowed the undulating panels and strips to flow across surfaces continuously.

The building was completed in 1931, as the nation continued its plunge into the Great Depression. The bank held a formal dedication ceremony on March 20, the same day that a *New York Times* front page headline called renewed attention to the growing problem of unemployment.[69] The bank's directors, perhaps intentionally avoiding the forecasts of financial gloom that

dominated the news, painted a picture of a bright and ascendant future. Pierson in particular saw the new building as a symbol of both the bank's and the city's growth, declaring, "We feel proud in being able to present to the public not just another building but a building which will represent a distinct step forward in American architecture and in banking service."[70] It was Stephen Voorhees, not Walker, who represented the firm at the event, receiving the public accolades of the bank's directors and praising not his own employees, but the Irving Trust for its "tireless . . . aid [to] the architects."[71] Walker, by contrast, was always careful to acknowledge the important role of his collaborators in the design, giving credit not only to his clients, but to P. C. Smith and Hildreth Meière in particular.

The reception of the design was mixed. As the Depression set in, the building, especially its interior, was considered too extravagant to be in particularly good taste. Lewis Mumford, missing the point, called it "pure swank, and unconvincing swank at that."[72] The bank itself, as an institution, seemed somewhat confused by the design and conducted surveys of doormen and clients to determine what the public's impression of the Red Room and lobby really was. The majority of answers indicated that they seemed to like it, though some complained that it was excessive.[73] This contemporary ambivalence about a *tour de force* of design was a hint of things to come.

The Irving Trust represents a turning point in Walker's career. It was the last of the 1920s towers, his last exploration of the skyscraper in the city. But it also highlights the primacy of Stephen Voorhees in controlling the work of Voorhees, Gmelin & Walker. Voorhees was the senior partner and would always place himself as the first representative of the firm, no matter how much credit should be directed to Walker for dramatically transforming the firm's work and reputation and giving them access to more and more ambitious clients. Walker's work in the next two decades shows his continued attempts to define himself as an individual practitioner even as he strove to preserve the integrity of the firm.

Imagining a World of Tomorrow

During the 1930s America sank into the Great Depression. The economic constriction had a tremendous impact on architecture — the building boom of the late 1920s dried up virtually overnight. Building began to slow in 1929, and by 1932, *Architectural Record* reported a one-year drop in construction volume of 60 percent, on top of a drop of 31 percent the year before. It was not until 1937 that construction began to approach the levels seen a decade earlier. Many firms closed entirely and others took on small projects to get by.[74]

Voorhees, Gmelin & Walker was one of the fortunate firms to survive, though in their darkest days they reportedly had only six employees.[75] While working for the telephone company, which continued to expand with projects like the AT&T Long Lines Building on Sixth Avenue (1932), ensured that the lights would stay on, a key part of the firm's survival was their participation in two of the most important architectural projects of the 1930s: the World's Fairs in Chicago in 1933 and in New York in 1939. Both Fairs had the difficult job of projecting a bright future in the midst of economic hardship. They were in some ways escapist fantasylands, holding out dreams of tomorrow for a public in search of something better. In Chicago, planning began for the Fair before the stock market crash of 1929; in New York, planning began as the effects of the Depression wore on.[76] Both Fairs, though, embodied a new development in American architecture and design, a tendency toward "streamlining" and simplification that is often associated with the economic strictures of the 1930s. Streamlining became the new language of modernity during the

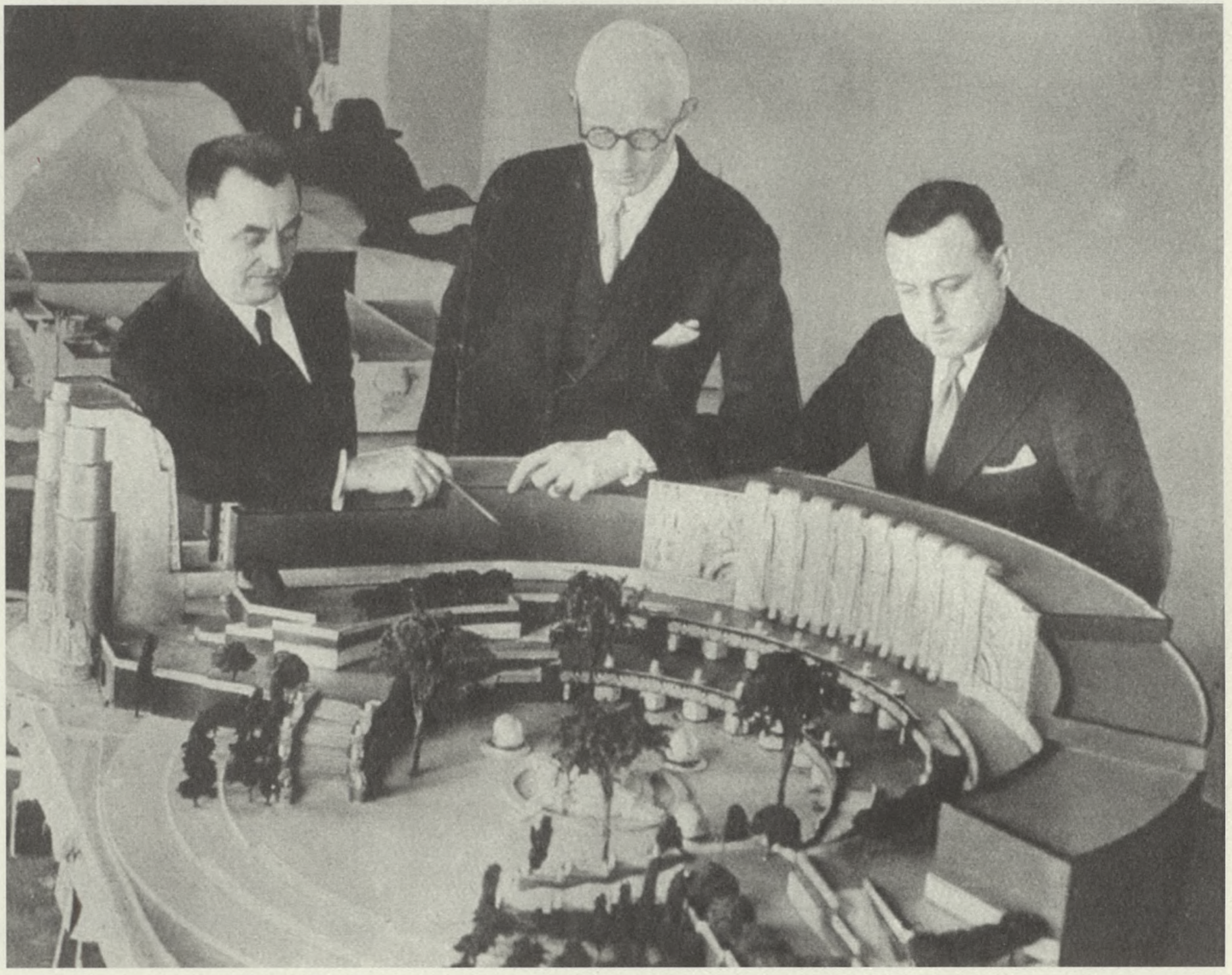
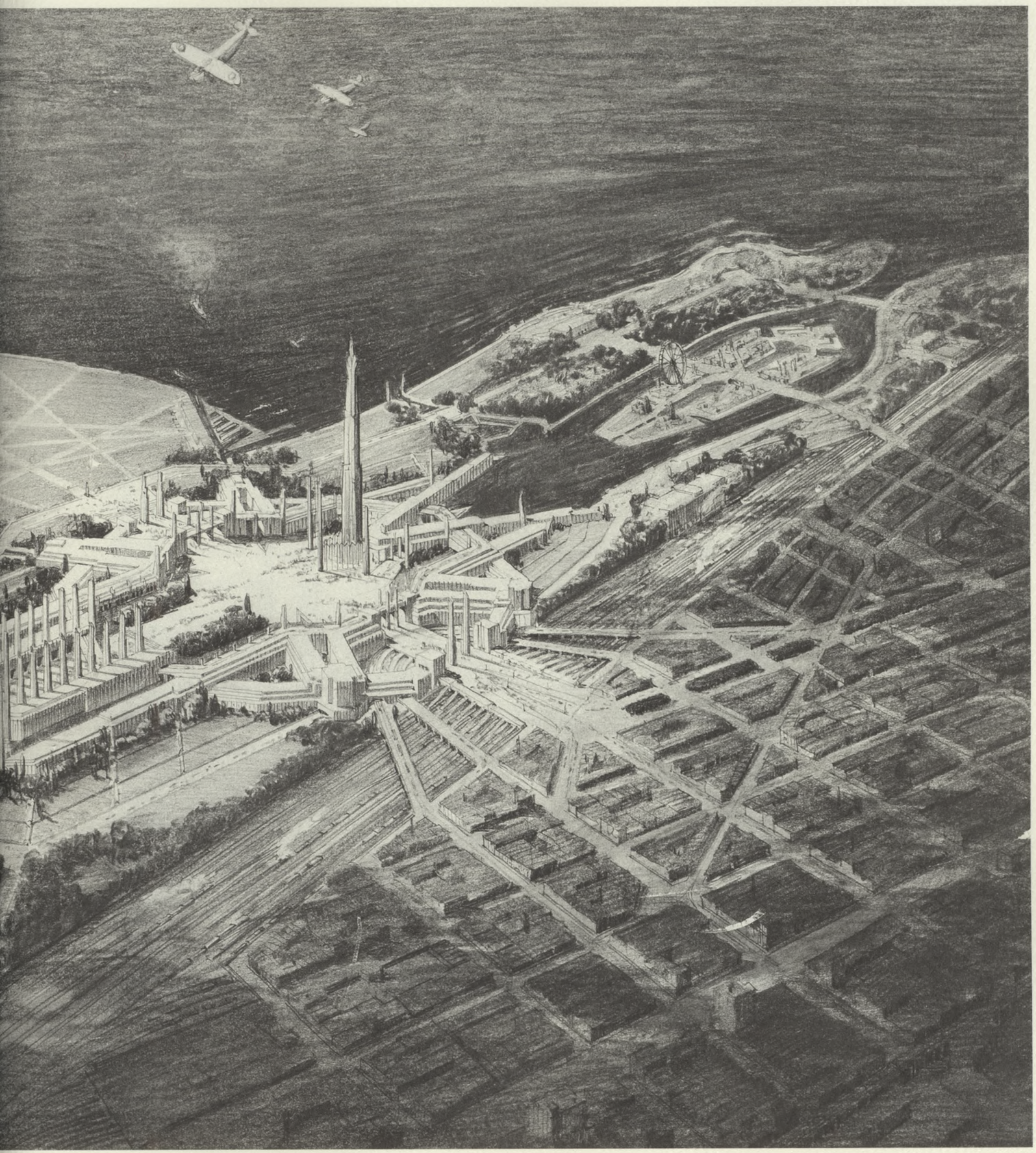


Figure 73. Raymond Hood, Harvey Wiley Corbett, and Walker observing a model of the 1933 Chicago World's Fair.

Newspaper clipping from Ralph Walker's personal scrapbook, courtesy HLW International LLP.

Figure 74. Ralph Walker, proposed site plan for the 1933 "Century of Progress" Chicago World's Fair, ca. 1929. Rendering by Chester B. Price.

Dept. of Drawings & Archives, Avery Architectural and Fine Arts Library, Columbia University.



Great Depression, its clean lines and industrial materials suggesting the "elimination of friction" and the "irresistible tide of modernity itself."[77]

Reinforcing this larger cultural movement toward aesthetic simplicity was the birth of the so-called International Style, a product of the Modern Architecture Exhibition held at New York's Museum of Modern Art in 1932. Here the curators, Henry-Russell Hitchcock and Philip Johnson, defined a new force in architecture by looking to designs from Europe, intentionally minimizing the importance of American work from the previous decade. The International Style specifically banned ornament, promoting in its place the clean lines of Le Corbusier's Villa Savoye and the floating planes of Mies van der Rohe's Barcelona Pavilion. The rise of the International Style and the promotion of its practioners in America came to have enormous consequences for Walker in the postwar years.[78]

But in the 1930s, before the full effects of these changes sank in, it simply meant that Walker would have to proceed in his designs for both Fairs largely without expressive ornament. Walker was a member of the Design Commission for the 1933 Chicago Fair, which blended Beaux-Arts practitioners like Paul Cret with modernists like Raymond Hood (Fig. 73). Walker was selected to bolster the "modernist" camp in 1929 after Louis Ayres, a partner in York and Sawyer in New York and a Beaux-Arts practitioner, declined a position. Walker, like the other commission members, produced conceptual designs for individual pavilions and for the site plan (Fig. 74–75). Severe budget constrictions, which became even worse as the Depression took hold, meant that Walker's contributions went unbuilt.

But in the optimistic months leading up to the first proposals for the Chicago Fair, Walker had the plum commission, the centerpiece of the entire exposition. Walker's unrealized Tower of Water and Light was to be located at the heart of a lagoon in the middle of the fairgrounds (Figs. 76–77). The enormous 600-foot tower was meant to be constructed of aluminum, its projecting fins reflecting sunlight by day and colored electric lights at night. It was a new

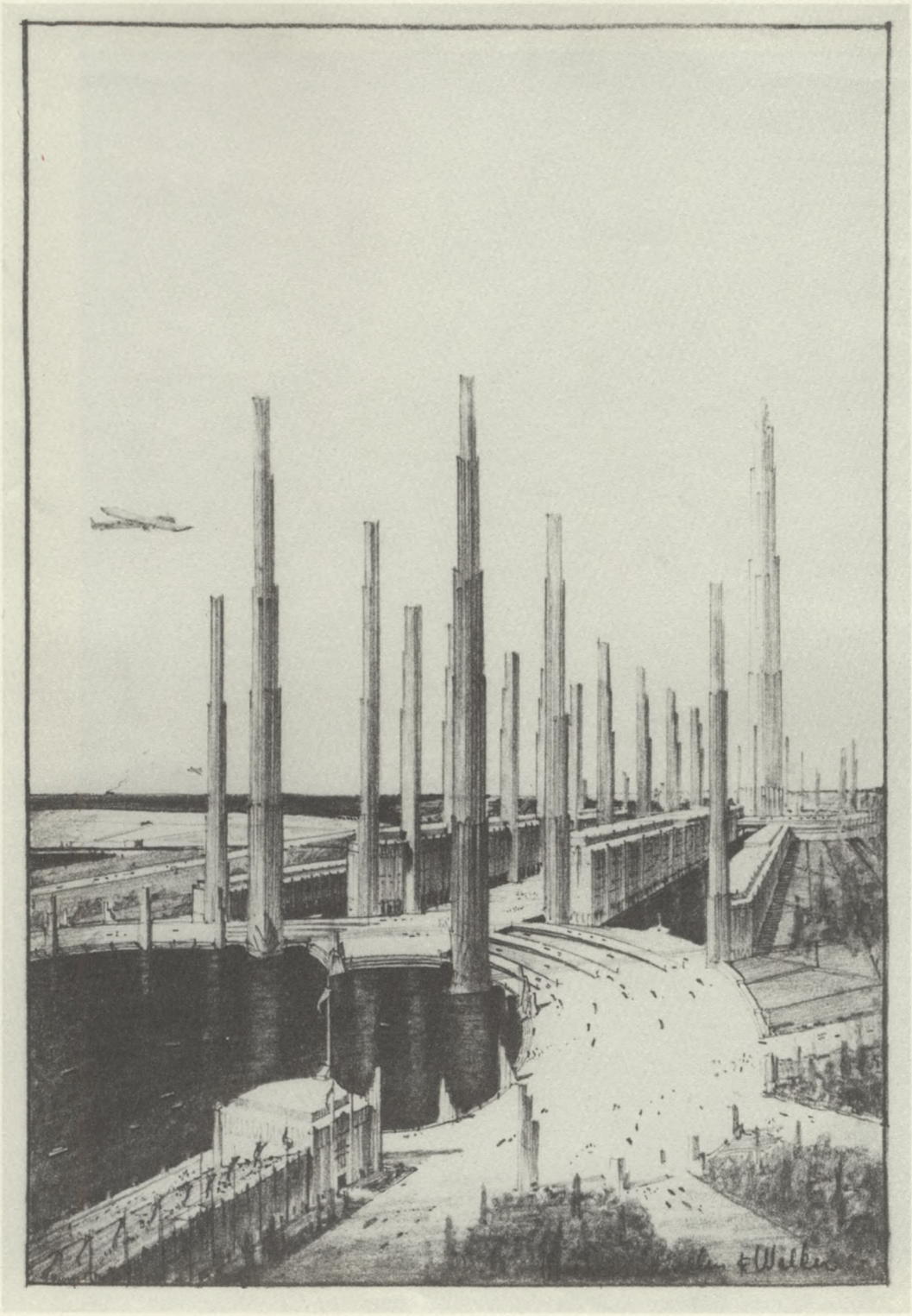


Figure 75. Ralph Walker, view down the causeway in his proposed scheme for the 1933 Chicago World's Fair, ca. 1929.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

Figure 76. Ralph Walker, proposed Tower of Water and Light for the 1933 Chicago World's Fair. The 600-foot tower was to be built of aluminum and glass with cascades of water crashing to the ground creating plumes of mist. John Wenrich, delineator, graphite, colored pencil, and watercolor on illustration board. Art Institute of Chicago, 1983.222, gift of Haines Lundberg Waehler in honor of their centennial.

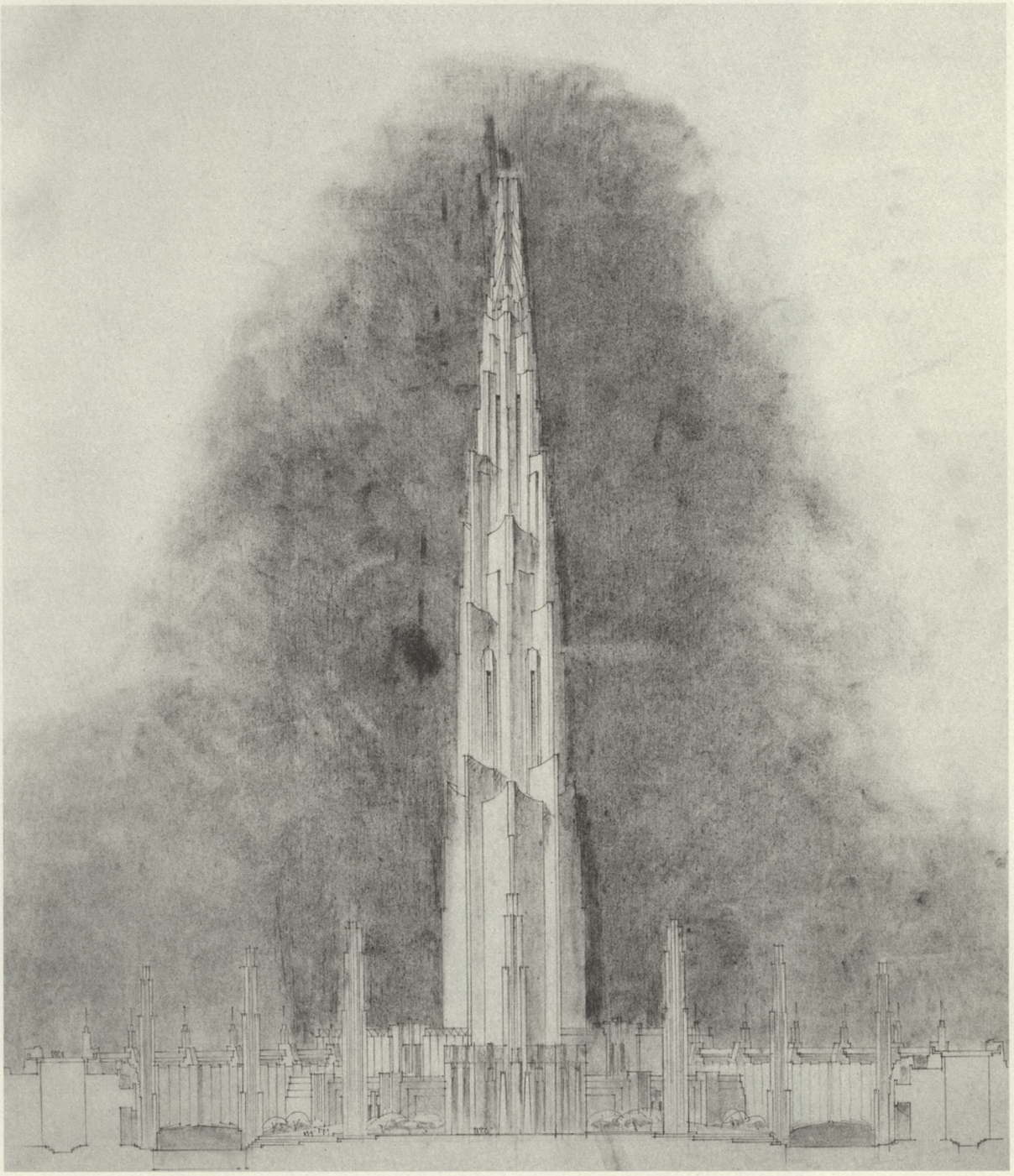


Figure 77. Ralph Walker, preparatory study for the design of the Tower of Water and Light. Pencil on tracing paper. *Art Institute of Chicago, 1988.32, Restricted gift of Edward H. Bennett, Jr., Mrs. Michael Goodkin, Andrew McNally III, Mrs. C. Phillip Miller, Mrs. Roderick Webster, and James Wells in honor of Mrs. Eugene A. Davidson.*

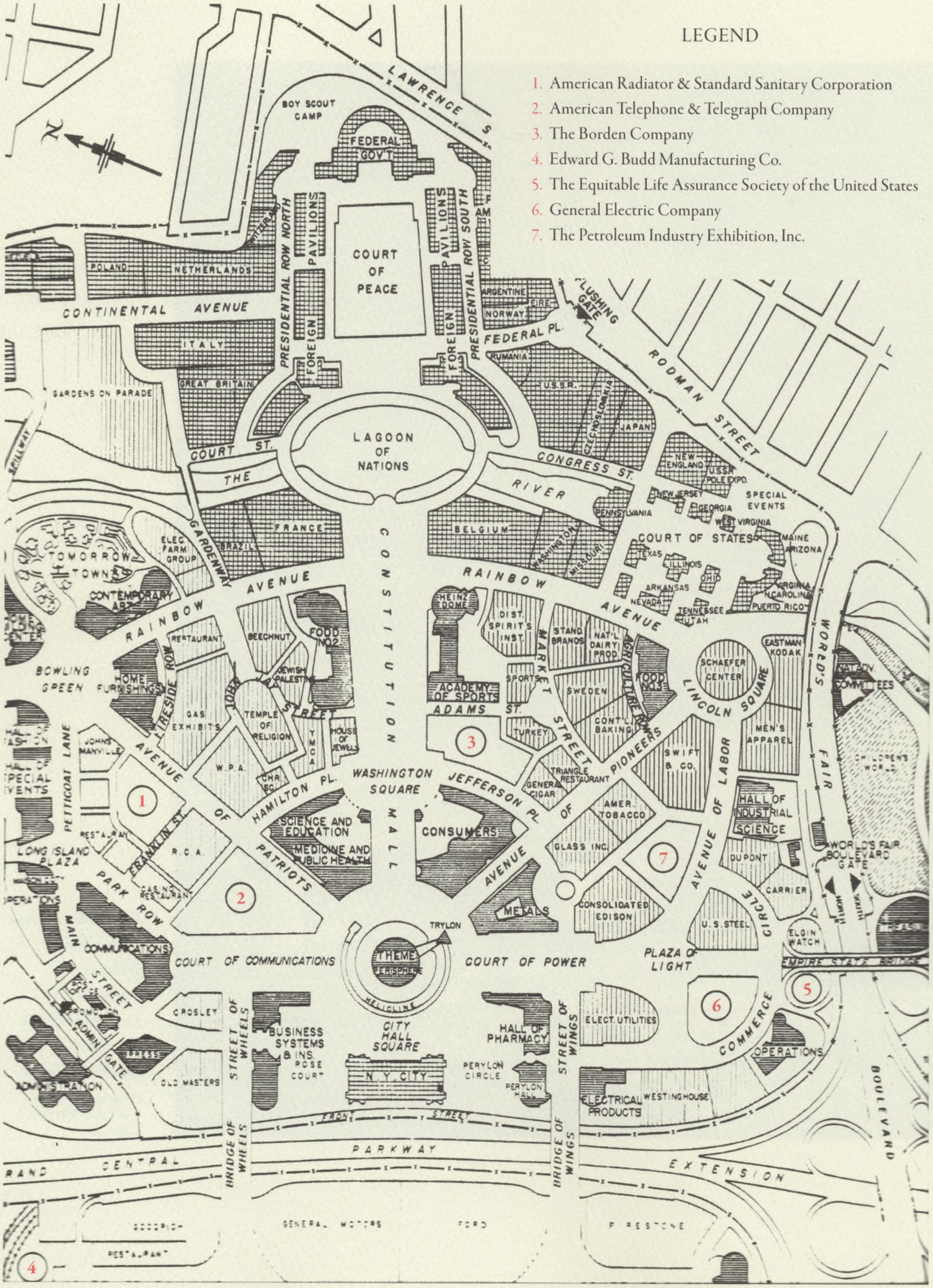
experiment for Walker, taking his ideas about theatricality, sensuality, and texture to their maximum experiential potential. A series of cascades plummeted down its sides, from a small headwater at the top to a crescendo of water at its base. The tower was meant to engage multiple senses: sound (the crashing of water), vision (reflected light in the clouds of water vapor), and texture (the smell of water vapor and its feel as it cooled the skin). It was Walker's masterwork.[79] But the Chicago Tower was the last great exploration of height in Walker's career. During the Depression the realities of cost and scale inhibited even the projection of these kinds of dreams on paper.

Planning the 1939 New York World's Fair began in the midst of the Depression and its initial goals were to provide a stimulus to the New York economy and to suggest to the public that a new world lay just around the corner. Grover Whalen, president of the Fair Corporation, suggested the architectural theme: "These buildings are themselves a glimpse into the future, a sort of foretaste of that better world of tomorrow, of which we hope in some part to be the harbingers. We feel that simplicity must be the keynote of a perfectly ordered mechanical civilization."[80] The iconic Trylon and Perisphere, designed by Wallace Harrison and J. André Fouilhoux, set the tone for this stripped-down, futuristic, and low-budget Fair (Fig. 78).

Voorhees was Chair of the Board of Design for the New York World's Fair, responsible for approving designs submitted for the pavilions and for doling out commissions to architects. Not surprisingly, he sent work to his own firm and Walker supervised the projects with Perry Coke Smith, building seven pavilions for the Fair.[81] The resulting pavilions represent a more restrained way of thinking, which took its cues from the streamlining of industrial design. They were delightful follies, explorations of simple geometric ideas on a large scale that would grab the attention of fair-goers (Fig. 79). Walker's Petroleum Pavilion, for example, began with a triangle, the Borden Pavilion with a circle, and the AT&T Pavilion with an arc. In each case, it is as if Walker took the basic underlying pattern language of a single piece of ornament

Figure 78. Harrison & Fouilhoux, Trylon and Perisphere, 1939 New York World's Fair, Flushing Meadows, Queens.

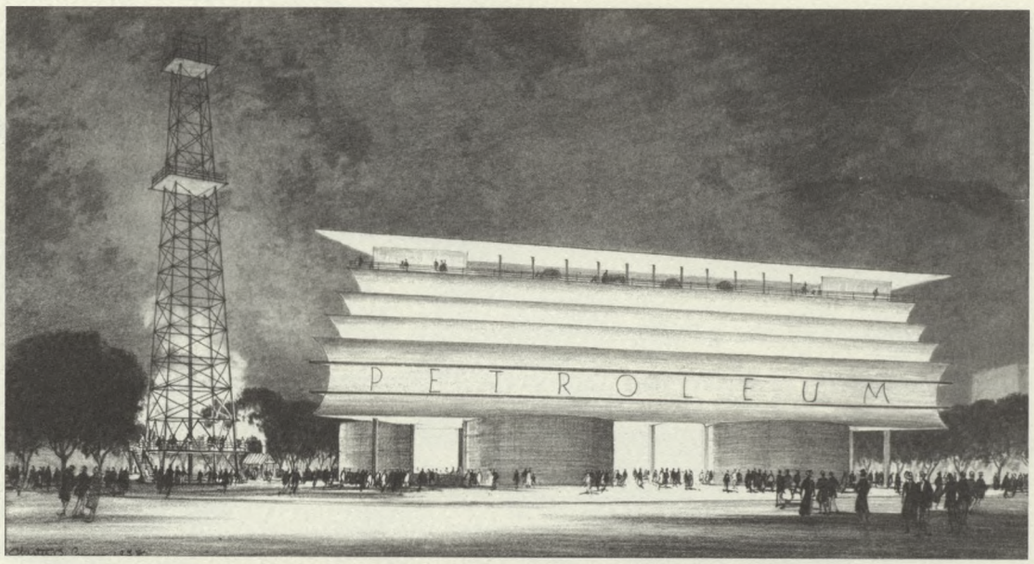
Photograph by Museum of the City of New York. Getty Images.


LEGEND
1. American Radiator & Standard Sanitary Corporation
2. American Telephone & Telegraph Company
3. The Borden Company
4. Edward G. Budd Manufacturing Co.
5. The Equitable Life Assurance Society of the United States
6. General Electric Company
7. The Petroleum Industry Exhibition, Inc.
LAWRENCE ST.
BOY SCOUT CAMP
FEDERAL GOV'T
COURT OF PEACE
PRESIDENTIAL ROW NORTH
PRESIDENTIAL ROW SOUTH
FOREIGN PAVILIONS
POLAND
NETHERLANDS
CONTINENTAL AVENUE
ITALY
GREAT BRITAIN
GARDENS ON PARADE
ARGENTINE
NORWAY
FEDERAL PL.
RUMANIA
U.S.S.R.
CZECHOSLOVAKIA
JAPAN
FLUSHING GATE
RODMAN STREET
LAGOON OF NATIONS
COURT ST.
THE RIVER
CONGRESS ST.
NEW ENGLAND
U.S.S.R. POLE EXPO.
NEW JERSEY
PENNSYLVANIA
GEORGIA
WEST VIRGINIA
SPECIAL EVENTS
FRANCE
BELGIUM
COURT OF STATES
MAINE
ARIZONA
TEXAS
ILLINOIS
ARKANSAS
NEVADA
VIRGINIA
N. CAROLINA
PUERTO RICO
TENNESSEE
UTAH
CONSTITUTION
GARDENWAY
BRAZIL
ELEC. FARM GROUP
TOMORROW TOWN
CONTEMPORARY ART
RAINBOW AVENUE
HEINZ DOME
DIST. SPIRITS INST.
STAND BRANDS
NAT'L DAIRY PROD.
AGRICULTURE
FOOD NO. 3
EASTMAN KODAK
SCHAEFER CENTER
WORLD'S FAIR
RESTAURANT
BEECHNUT
FOOD NO. 2
HOME FURNISHINGS
BOWLING GREEN
GAS EXHIBITS
TEMPLE OF RELIGION
JEWISH PALESTINE
LOBBY
Y.M.C.A.
HOUSE OF JEWELS
ACADEMY OF SPORTS
SPORTS
SWEDEN
CONT'L BAKING
TURKEY
ADAMS ST.
MARKET STREET
LINCOLN SQUARE
MEN'S APPAREL
JOHNS MANVILLE
PETTICOAT LANE
W.P.A.
CHR. SCI.
HAMILTON PL.
WASHINGTON SQUARE
JEFFERSON PL.
TRIANGLE RESTAURANT
GENERAL CIGAR
SWIFT & CO.
PIONEERS
AVENUE OF LABOR
HALL OF INDUSTRIAL SCIENCE
SCIENCE AND EDUCATION
MEDICINE AND PUBLIC HEALTH
CONSUMERS
AMER. TOBACCO
GLASS INC.
DUPONT
WORLD'S FAIR BOULEVARD GATE
LONG ISLAND PLAZA
R.C.A.
FRANKLIN ST.
PARK ROW
PATRIOTS AVENUE
METALS
CONSOLIDATED EDISON
U.S. STEEL
CARRIER
CIRCLE
ELGIN WATCH
TRYLON
THEME
PERISPHERE
HELICLINE
COURT OF COMMUNICATIONS
COURT OF POWER
PLAZA OF LIGHT
MAIN
COMMUNICATIONS
STREET
CROSLEY
ADMIN.
GATE
ADMINISTRATION
OLD MASTERS
STREET OF WHEELS
BUSINESS SYSTEMS & INS.
ROSE COURT
CITY HALL SQUARE
N.Y. CITY
HALL OF PHARMACY
PERYLON CIRCLE
PERYLON HALL
STREET OF WINGS
ELECT. UTILITIES
COMMERCE
OPERATIONS
ELECTRICAL PRODUCTS
WESTINGHOUSE
BRIDGE OF WHEELS
BRIDGE OF WINGS
PARKWAY
EXTENSION
BOULEVARD
GENERAL MOTORS
FORD
F. FIRESTONE
GOODRICH
RESTAURANT

from the 1920s buildings and used it to create the plan and volume of an entire pavilion. He would later write that World's Fair designs were "most satisfactory when they verge on the absurd and especially when they call attention to themselves in no uncertain terms as 'a shocker'."[82] The Drake's Cakes Pavilion, designed like a miniature carousel with a colorful tented roof, captured this circus-like spirit perfectly.

The surfaces of the pavilions continued this theme. Rather than use applied ornament, as Walker had done in the 1920s, the surfaces themselves became articulated. The three exterior walls of the Petroleum Pavilion consisted of long, parallel steel panels that echoed the hard, angular, crystalline form of the building and that, to Walker, represented the Herculean nature of the industry itself (Figs. 80–82). Industrial materials, rather than ornament, were a key theme. The cladding of the GE Pavilion was copper, a visual link to the industry's dependence on copper wiring. The diminutive open-air canopies of Budd Manufacturing Company emphasized that company's pioneering role in developing high-quality commercial stainless steel for use in aviation and railroad engines. Walker cantilevered petals of stainless steel from a core of six central supports to create a span of sixty shaded feet (Fig. 83). The columns and grilles of the American Radiator Pavilion were composed of chimney-flue tiles, copper tubing, and radiator parts. When traditional ornament did appear, it was in work commissioned from artists rather than architect-designed pattern. Rockwell Kent provided murals for the GE Pavilion, Hildreth Meière for the AT&T Pavilion, and William Tefft Schwarz for the Petroleum Pavilion.[83]

Figure 79. Voorhees, Walker, Foley & Smith, site plan of the 1939 New York World's Fair with pavilions by their firm listed and indicated. From their self-published World's Fair Architecture *(1960).* Private collection.


PETROLEUM

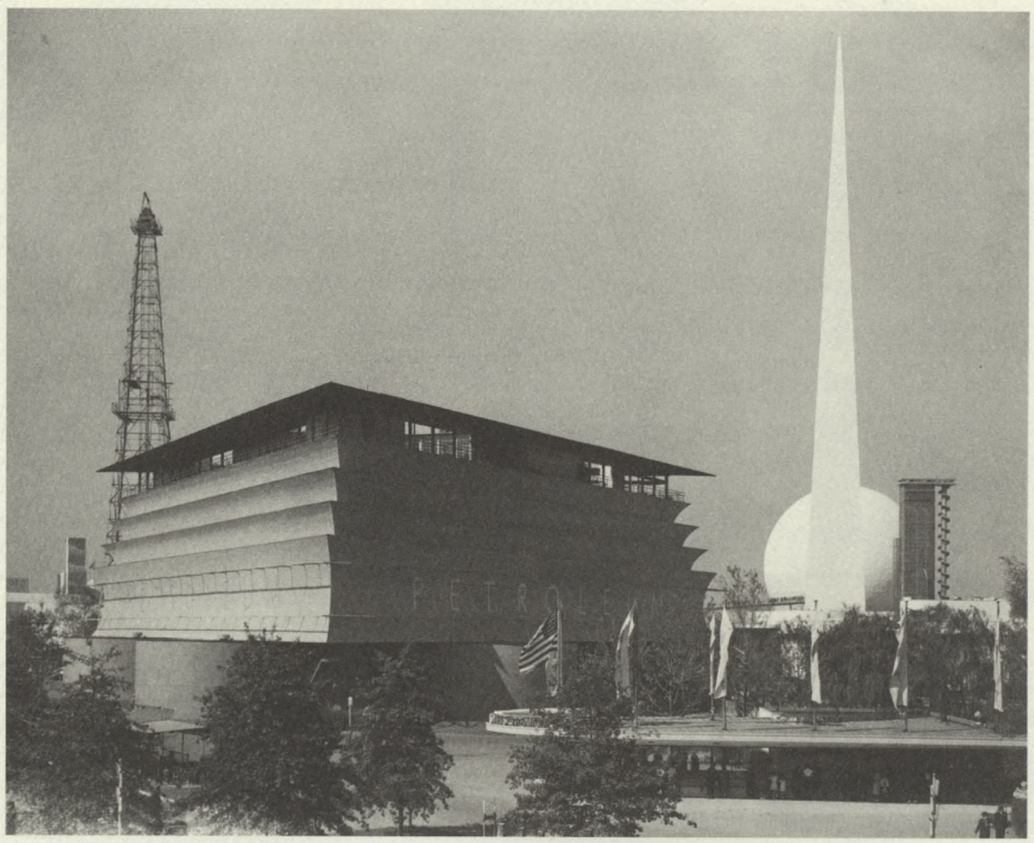


Figure 80. Opposite, top: Voorhees, Walker, Foley & Smith, proposal for the Petroleum Pavilion. Rendering by Chester B. Price. This night view of the pavilion highlights the dramatic lighting that brought the steel panels to life in the dark.

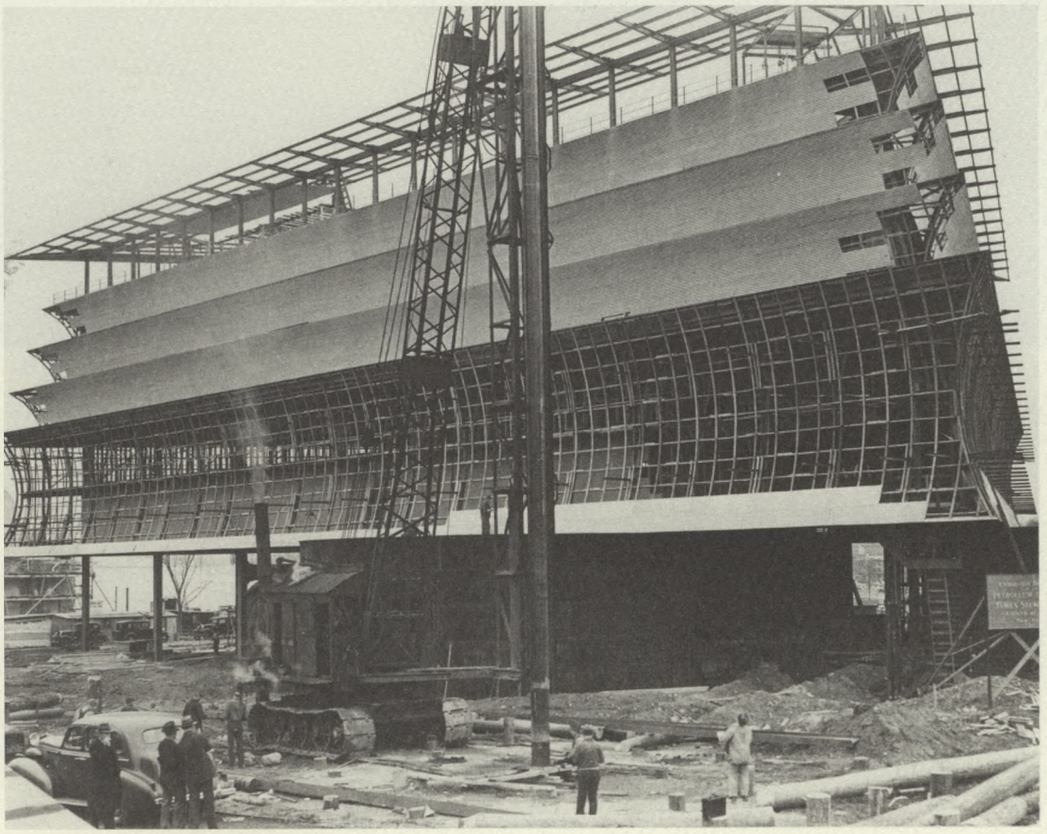
Dept. of Drawings & Archives, Avery Architectural and Fine Arts Library, Columbia University.

Figure 81. Opposite, bottom: The Petroleum Pavilion was intended to be the home for Walker and Waller's "Cinerama" experience which was sadly deemed too expensive and replaced with a puppet show demonstrating the history of the petroleum industry.

New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

Figure 82. This page: The steel panels on the exterior of the Petroleum Pavilion suggested the industry's strength.

New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.



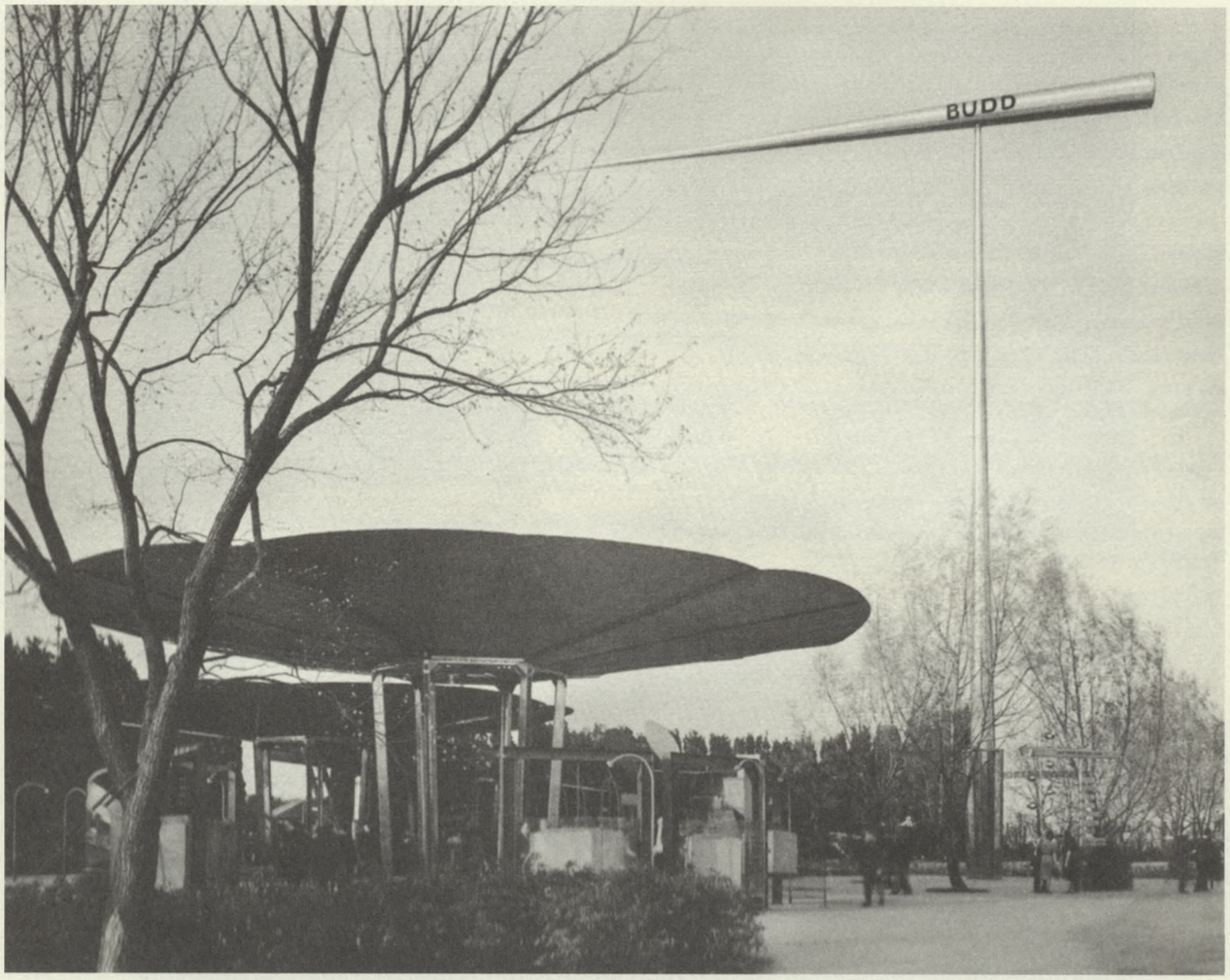


Figure 83. Voorhees, Walker, Foley & Smith designed smaller pavilions as well, like this shaded display about the steel industry for Budd Manufacturers. Ralph Walker, Architect *(1957).*

Walker pursued innovations in film presentation through collaboration with Fred Waller, a specialist in screen and projection technologies. Walker envisioned a projection room at the Petroleum Industry Pavilion that would be elliptical and allow the projection of films that "surrounded" the viewer on all sides and from above in a kind of early premonition of the IMAX theater. While the petroleum industry deemed Walker and Waller's proposal for a collaged projection of "A World Without Friction" too elaborate and expensive — opting instead for a puppet show! — Walker and his firm became major investors in what became Cinerama, a system that utilized three film projectors to project overlapping images onto a curved screen. Cinerama debuted to the public in 1952, with *This Is Cinerama* just as television began to seriously erode movie ticket sales. Marketers emphasized the unique theater experience, and audiences bought tickets for reserved seats and dressed up as if going to the opera or theater. Walker was proud of his part in this invention, seeing it as evidence of his continued expertise in the nature of theater, uniting his ability to be both a visionary inventor and a pragmatic businessman at the same time.[84]

More dramatic than the Petroleum Pavilion's puppet show was the indoor lightning field at the GE Pavilion where noisy, powerful displays of high-voltage discharges entertained fair visitors (Figs. 84–86). The need for a large, windowless interior volume created the industrial shed of Steinmetz Hall, designed as an insulated Faraday cage, its simple profile enlivened only by the presence of an enormous on/off switch on an exterior wall. These kinds of technological flourishes drove the Fair — even the milk industry emphasized technology. Walker designed the Borden Pavilion to show the efficiency of the new "Rotolactor," a mechanical turntable that allowed cows to be milked faster. The cows were milked and the milk was pasteurized, cooled, and delivered to Fair visitors at a Milk Bar at the center of the Pavilion. Walker's design emphasized the smooth delivery process as visitors followed the "Milky Way" step by step along a continuous curve (Figs. 87–89).

Figure 84. At night the enormous lightning bolt sculpture in front of the GE Pavilion was lit up with colored neon tubes.

New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

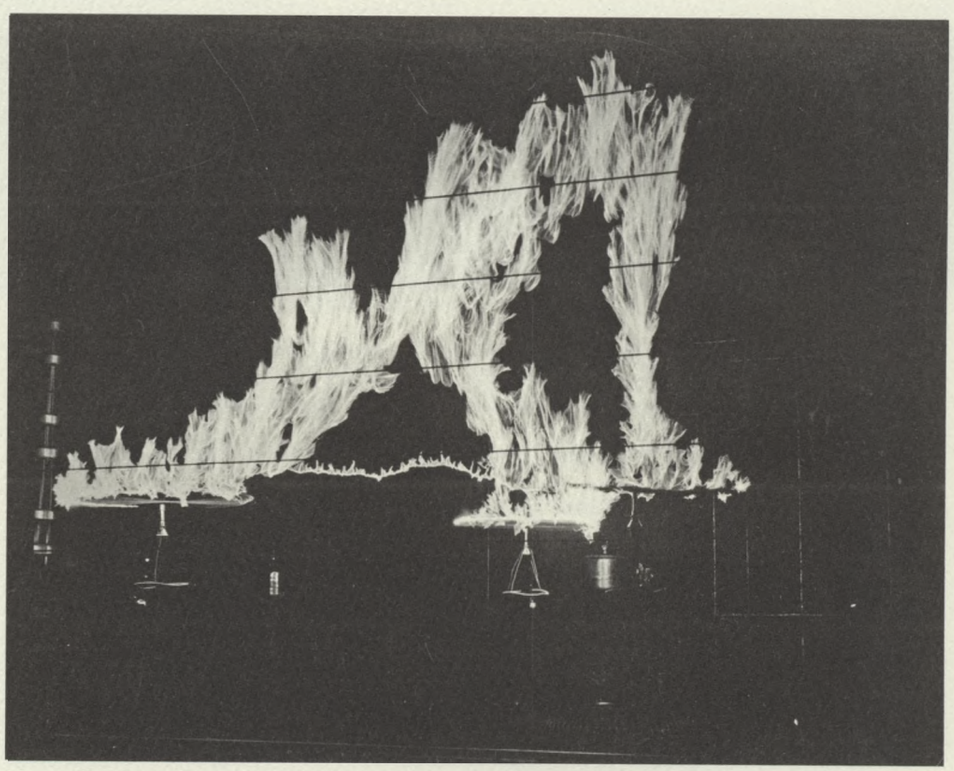


Figure 85. The indoor lightning field in Steinmetz Hall impressed visitors with what the Fair's official guidebook described as "vivid lightning, thunderous noise, 10 million volts flashing over a 30-foot arc."

New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

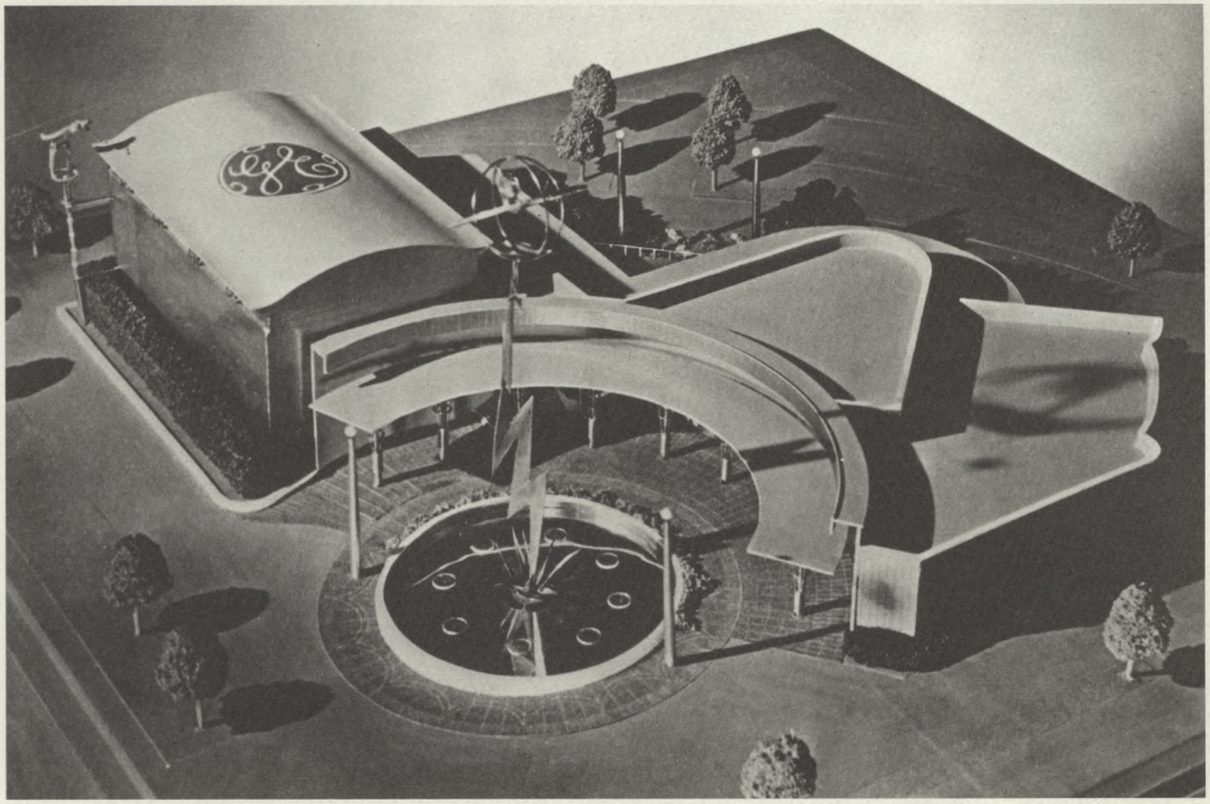


Figure 86. Voorhees, Walker, Foley & Smith, model of the General Electric Pavilion. The GE Pavilion was dedicated to displays about the wonders of electricity and the many home appliances that it powers. At left, with the GE logo on the roof, was Steinmetz Hall, the location of the indoor lightning field. New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

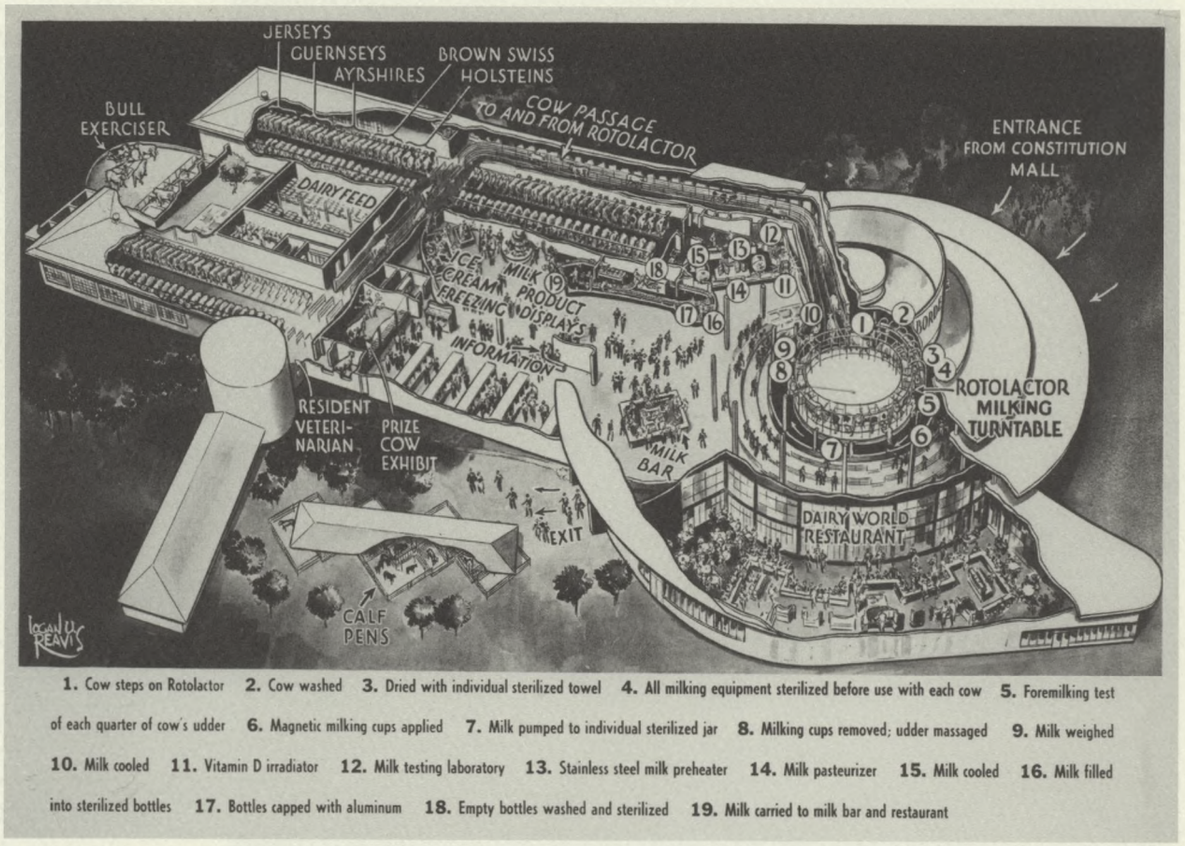

JERSEYS
GUERNSEYS
AYRSHIRES
BROWN SWISS
HOLSTEINS
BULL EXERCISER
COW PASSAGE TO AND FROM ROTOLACTOR
ENTRANCE FROM CONSTITUTION MALL
DAIRY FEED
ICE CREAM FREEZING
MILK PRODUCT DISPLAYS
INFORMATION
ROTOLACTOR MILKING TURNTABLE
RESIDENT VETERINARIAN
PRIZE COW EXHIBIT
MILK BAR
EXIT
DAIRY WORLD RESTAURANT
CALF PENS
1. Cow steps on Rotolactor 2. Cow washed 3. Dried with individual sterilized towel 4. All milking equipment sterilized before use with each cow 5. Foremilking test of each quarter of cow's udder 6. Magnetic milking cups applied 7. Milk pumped to individual sterilized jar 8. Milking cups removed; udder massaged 9. Milk weighed 10. Milk cooled 11. Vitamin D irradiator 12. Milk testing laboratory 13. Stainless steel milk preheater 14. Milk pasteurizer 15. Milk cooled 16. Milk filled into sterilized bottles 17. Bottles capped with aluminum 18. Empty bottles washed and sterilized 19. Milk carried to milk bar and restaurant

Figure 87. Voorhees, Walker, Foley & Smith, Borden Pavilion, 1939 New York World's Fair. The Borden Pavilion displayed the entire process of getting milk from farm to grocer. Visitors to the pavilion followed a "Milky Way" from step 1 to 19, following the milk from cow to pasteurizer, bottle, and Milk Bar. *New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.*

Figure 88. The central cylinder of the Borden Pavilion provided the starting point for the tour. New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

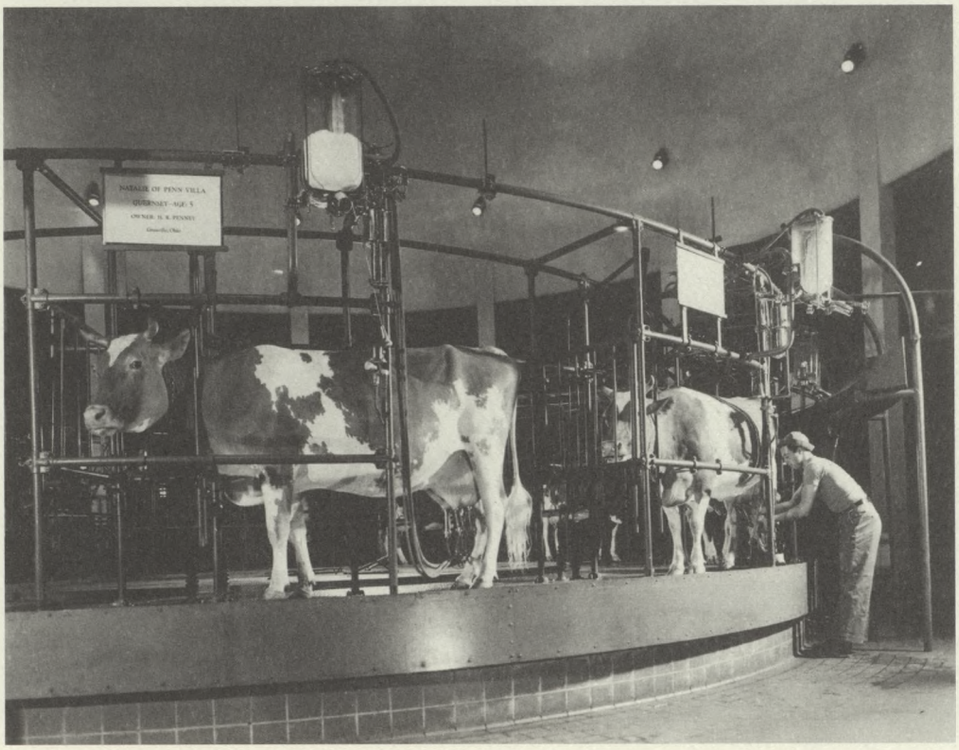


Figure 89. The rotolactor, a rotating turntable for milking cows, was the centerpiece of the pavilion. Walker would later recall that he pushed Borden to promote brown-eyed Elsie the Cow as their mascot at the Fair. New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

Figure 90. Voorhees, Walker, Foley & Smith, AT&T Pavilion. The AT&T Pavilion was located adjacent to the Trylon and Perishpere (the edge of the great sphere is in the lower right-hand corner of the photograph). Walker pushed for a fully-grown grove of trees to provide a place of shade and rest for visitors.

New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

The AT&T Pavilion showed Walker trying to create the same kind of tactile, sensual experience he aimed for at the Tower of Water and Light using different means and a much smaller scale. Located off the central plaza adjacent to the Trylon & Perisphere, the pavilion provided a path under a peristyle, through a grove of pine trees, and into a covered shaded garden that provided a sharp contrast to the vast open spaces of the Fair's main promenade and the parade of industrial materials. Walker collaborated with landscape architects Vitale and Geiffert to produce what he called "green architecture." After making free long-distance calls and sending free telegrams inside, Fair visitors could rest in gardens cooled by trees, fountains, and landscaping (Figs. 90–91).[85]

But Walker's pavilions were not the most noticed or popular of the Fair. The central Trylon and Perisphere and Norman Bel Geddes's incredible Futurama for General Motors created the Fair's indelible images. If the telephone had been revolutionary in the 1920s, by the late 1930s the automobile had captured the public imagination. More than 25 million viewers flocked to Futurama to see Geddes's city of the future, an enormous model of a sprawling city defined by swooping highways with mechanical cars.[86] GM and Geddes's vision for the future was a decentralized, suburban landscape serviced by fast-moving personal automobiles and a flourishing interstate highway system. The city, the dominant image of the 1920s, would have competition in the American imagination as the suburbs boomed in the postwar world.

Figure 91. The pavilion also provided a shaded garden underneath, designed by Vitale and Geiffert.
New York World's Fair 1939–1940 records, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

The Postwar City and Suburb

After World War II, Walker and his firm built very few large-scale buildings in New York City. In general, relatively few tall buildings were built at all in New York: between 1947 and 1960 only 20 of the 109 buildings built in New York exceeded 30 stories.[87] Those that were built began to show a dramatic change from the setback form that Walker had helped pioneer. Beginning with designs like Skidmore, Owings and Merrill's Lever House and Mies and Johnson's Seagram Building, the setback style gave way to the monolithic slab with a glass curtain wall set in an open plaza — the antithesis of the massive, masonry towers of the 1920s. Ely Jacques Kahn's skyscraper designs from the 1950s and 1960s, for example, are startlingly plain and monochromatic, lacking his trademark polychrome and setbacks. Where streamlining had forced a scaling back in the 1930s, by the 1950s, the influence of the clean lines of the International Style could no longer be ignored.

For Walker's firm this change was compounded by the reorientation of their work from the city to the suburb, from the tall buildings of the 1920s to the spreading, low-rise campuses of the countryside. Beginning in the late 1930s, the firm continued its work for Bell Telephone, building not urban telephone buildings, but Bell Laboratories, its new suburban research campus in Murray Hill, New Jersey (Figs. 92–93). The campus was isolated, far from prying eyes, and allowed for war-time research on military applications of transatlantic telecommunications. Scientists at Bell Labs across the decades have pioneered major innovations, including inventions like the transistor and the photovoltaic cell. The campus blended needs for security, high-tech laboratory

Figure 92. Voorhees, Walker, Foley & Smith, Bell Laboratories first phase, Murray Hill, New Jersey, 1939-41. Walker encouraged the use of rustic fieldstone to help the industrial building fit into the semi-rural landscape of suburban Murray Hill.

Photograph by Sigurd Fischer. Courtesy HLW International LLP.

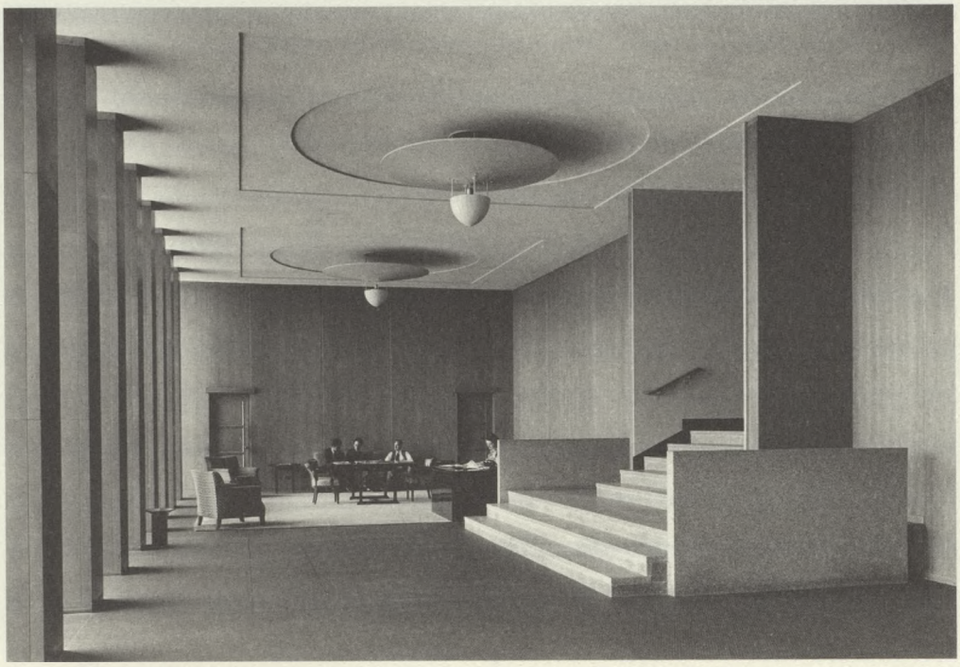


Figure 93. The design of the reception hall at Bell Labs reflected the streamlining of the World's Fairs. While Walker's trademark ornament is absent, the lighting and wall surfaces retain the signature style of the 1920s.

Photograph by Sigurd Fischer. Courtesy HLW International LLP.

equipment, and a working environment that promoted creativity and technological innovation. When the first phase of Bell Labs was completed in 1941, it set a new standard for the design of a flexible laboratory module that allowed the reconfiguration of research space to suit scientists' changing needs, what Walker called "the activities of the curious."[88] It was a revolutionary design for industry, one that became a benchmark for other postwar research campuses.[89]

Walker had a central role in articulating the firm's approach to the lab design, coordinating the practical collaboration between the firm's design team and a committee of scientists from Bell Labs. Humanism remained a central theme, but it meant something different in the suburbs. The creation of social spaces for interaction among scientists and abundant access to views of the surrounding landscape (rather than the spires of surrounding skyscrapers) provided the "spiritual" side of the design. Walker later wrote that "the movement of research laboratories into rural surroundings is predicated on the premise of a much more normal and traditional working life — part of which is the ability of viewing a pleasant outer world."[90] The resulting building, despite its sprawling footprint, thus had a domestic, rustic feel, with rough stone on the exterior walls. Every laboratory had windows, and bucolic pastureland could be viewed from the inside and from walkways that curved around the building's perimeter (Fig. 94).

While Walker established the parameters for this new typology, the firm's younger associates took the lead in defining its details. Their perspective highlighted the difficulties that Walker would increasingly face. In *Convenience for Research*, written to document the design of Bell Labs, Don Graf articulated the project's design philosophy in language that openly rejected Walker's work of the 1920s, dismissing ornament and embracing the more nebulous concepts of "character" and "convenience:" "Over ninety years ago, John Ruskin wrote that a building could be called 'Architecture' only if it had decoration on it! But ideas governing architectural design have changed a great deal . . . and modern architects have proved that excellence in buildings may

Figure 94. The landscape around the lab buildings provided places for relaxation. A young woman leans against a ledge reading a book while others stroll casually. These images intentionally suggested the idea of a university campus.

Photograph by Sigurd Fischer. Courtesy HLW International LLP.

depend upon fundamentals other than stonework garlands, plaster cartouches, and painted friezes. Architecture in its true sense stems from what architects themselves term 'character' — meaning a convenient arrangement of the interior spaces, reflected truthfully in the exterior appearance."[91]

By 1950 the postwar commercial building boom was finally under way. Voorhees, Walker, Foley & Smith capitalized on its success at Bell Labs and became specialists in complex designs for research laboratories and suburban corporate campuses that had very little distinguishing external character, but much efficiency and convenience.[92] The firm became even more prosperous than it had been in the 1920s, following the exodus of corporate headquarters and research facilities from Manhattan, building campuses for General Foods in White Plains, for IBM in Poughkeepsie, for General Electric in Schenectady, for Procter & Gamble in

Cincinnati, and for the Ford Motor Company in Dearborn. However, Walker lost the creative inspiration that the city had provided in the 1920s.

For Walker, the success of these designs was both a triumph and a bitter pill. While he insisted that these corporate clients could still maintain an emphasis on beauty, the optimism and creativity of the 1920s "urban giants" disappeared from his work.[93] Walker became suspicious of the city that had once inspired him: "In my lifetime I have seen the city disintegrate from a well-articulated central form into a chaotic mass sprawling ever outward — disturbing not only the old pleasant urban patterns but the gracious countryside as well."[94] Walker became more and more deeply conflicted.

Since the 1930s, he had dabbled in new schemes for urban form, though none were built. With Raymond Hood, he created the unbuilt plans for Terminal Park in Chicago, the precursor to Hood's later masterpiece at Rockefeller Center in New York. Terminal Park used a strong axis centered on public space to lead to a group of tall, planar towers (Fig. 95–98). During the building drought of the 1930s, Walker dreamed of a parklike Manhattan, one that inverted the proportion of green space to buildings — instead of Central Park surrounded by towers, the city became an island of towers surrounded by green.

The closest Walker came to realizing these plans, though, was in a suburban setting, with his firm's designs for the massive middle-class housing complex Fresh Meadows in Queens commissioned as a real estate investment by the New York Life Insurance Company. Planned on the site of a former golf course, Fresh Meadows began construction in 1945 in anticipation of the postwar housing boom; the first of its more than 3,000 apartments came available for lease in 1947.[95] The development was based on Voorhees, Gmelin & Walker's explorations of public housing from the 1930s and it consisted of simple red-brick buildings, with modest streamlined details in white wood, ranging in scale from 2-story duplexes to 3- and 4-story apartment buildings, surrounding reinforced concrete apartment towers at the center. All the residential buildings were scattered through a park-like setting with ample

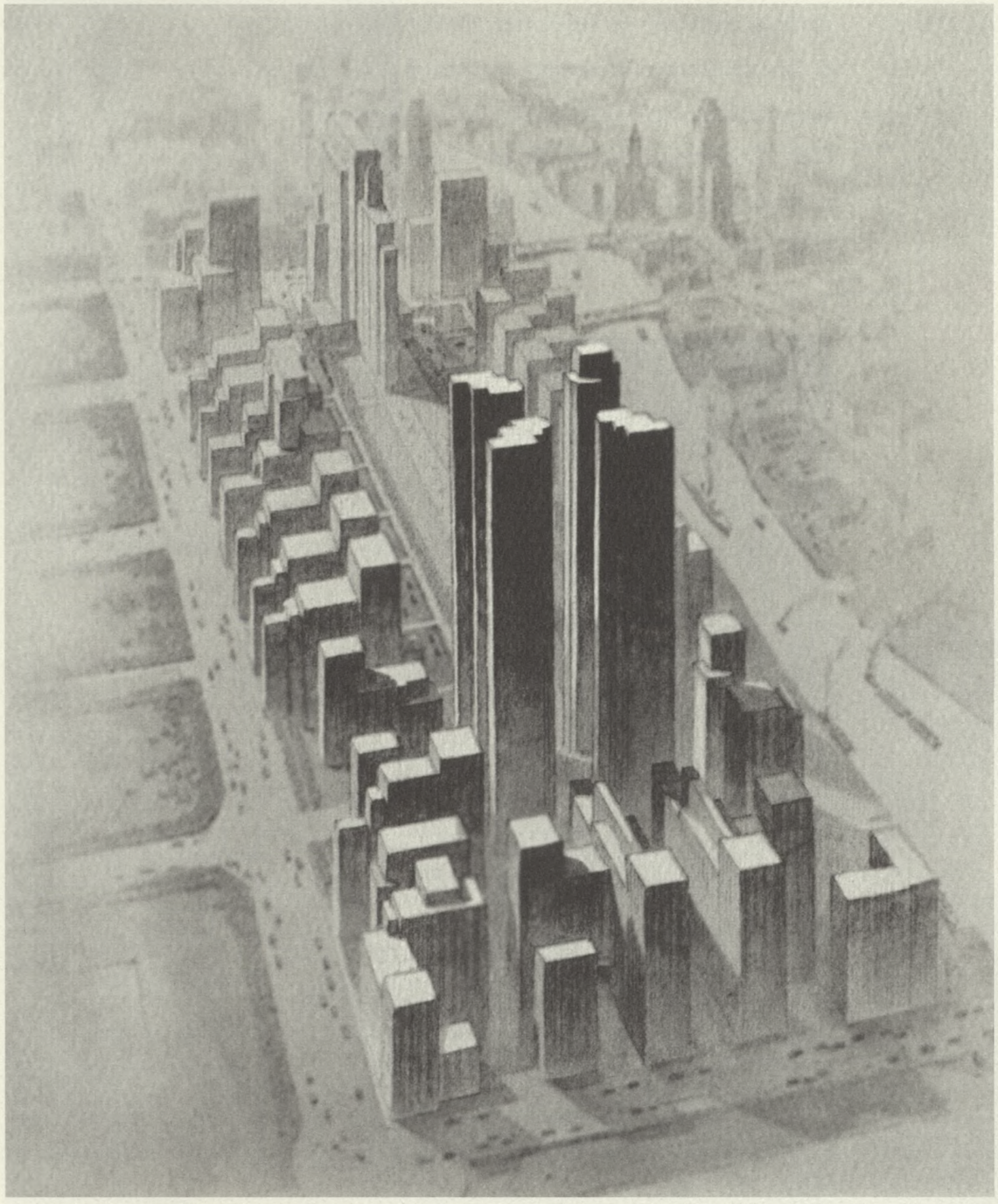
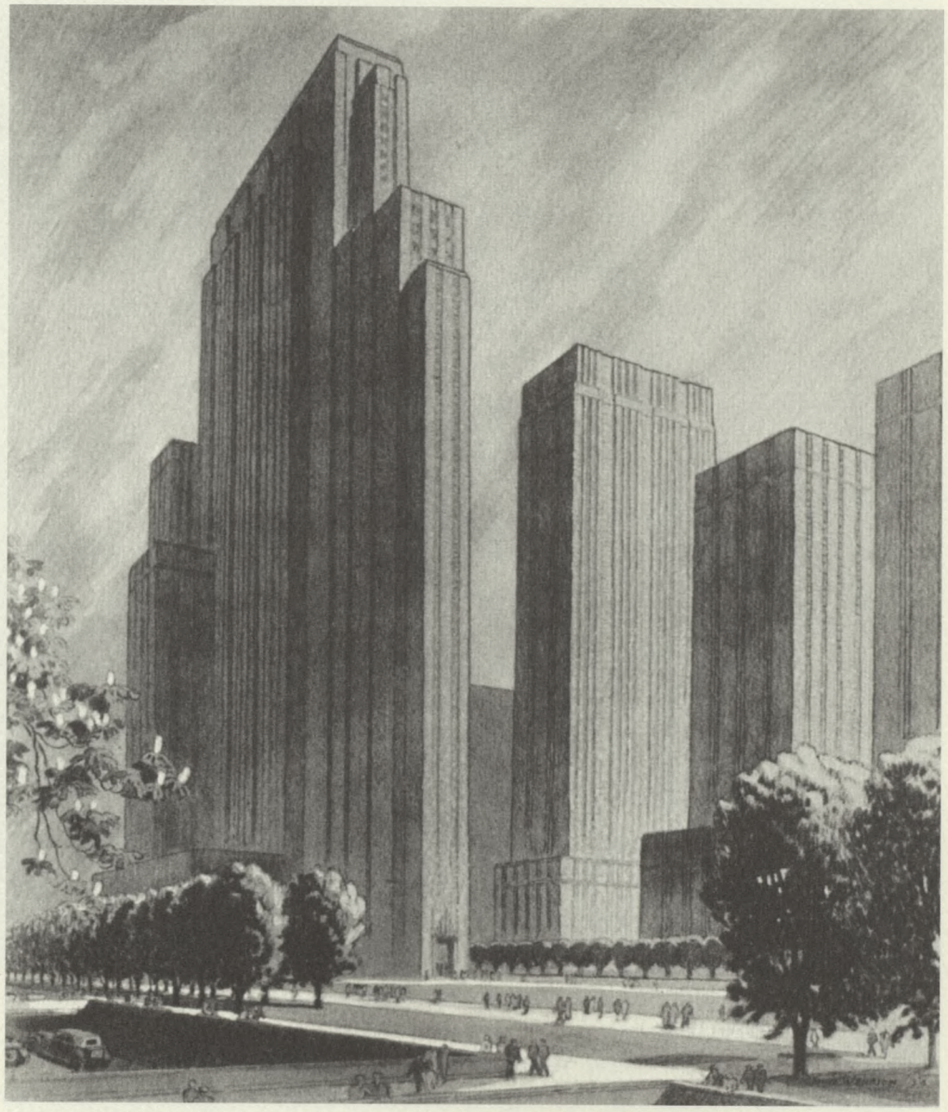
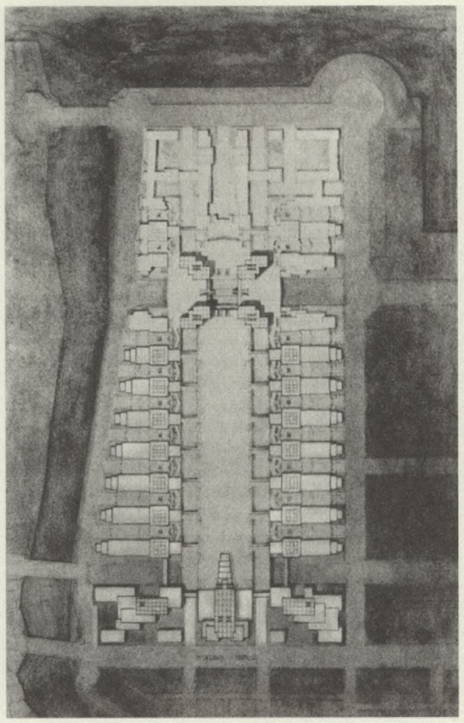


Figure 95. Ralph Walker, proposed design for Terminal Park, Chicago, an unbuilt project intended to redefine Michigan Avenue. Walker worked with Raymond Hood on this project that predated Rockefeller Center. Ralph Walker, Architect *(1957).*

parking and a shopping center, movie theater, post office, and gas stations on the perimeter, creating a transition between the new development and the existing neighborhood of cookie-cutter single-family houses (Figs. 99–100). With this project, Walker returned to Mumford's good graces at last, as he praised it as "perhaps the most positive and exhilarating example of large-scale community planning in this country."[96]





Figures 96–98.
Opposite and this page: Terminal Park centered on the Beaux-Arts arrangement of a graduated series of towers that defined a central park; Fig 98 (right) is rendered by John Wenrich. The project mixed residential, office, and commercial uses with direct access to underground parking and railroad connections.

Ralph Walker, Architect
(New York, 1957).

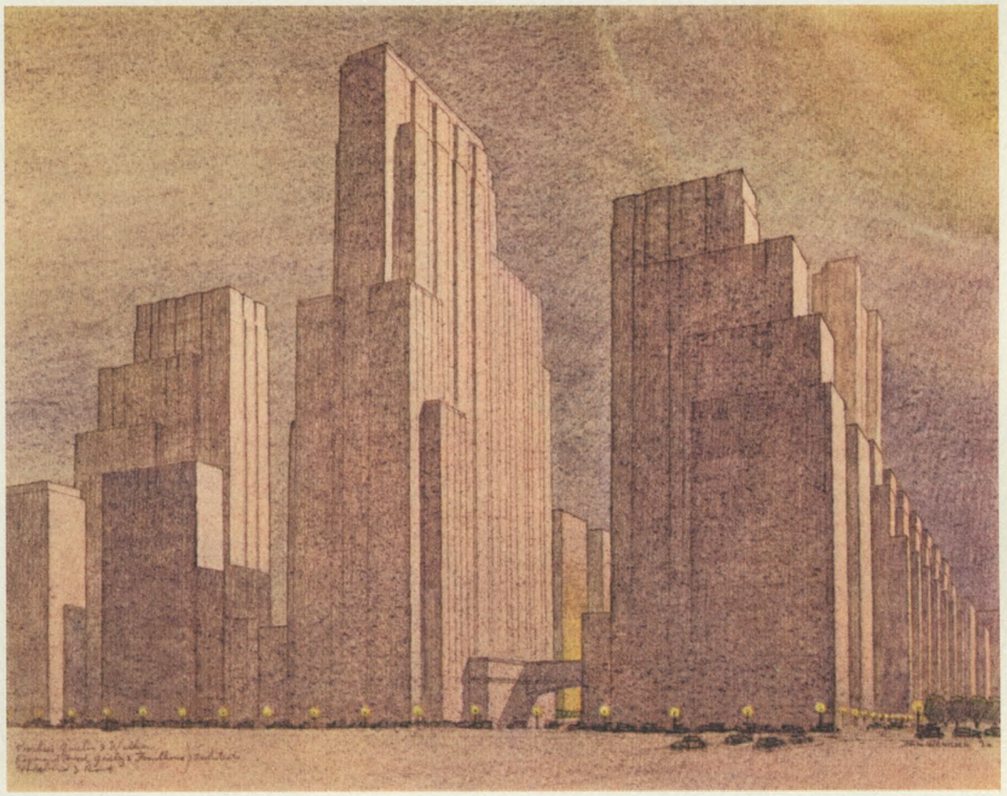


Figure 99. Voorhees, Walker, Foley & Smith, Fresh Meadows, Queens, 1945–48. The towers and apartment blocks of Fresh Meadows were surrounded by open green spaces, providing a dramatic contrast to the dense and repetitive single-family homes that lined the suburban streets of Queens.

Photograph by Fairchild Aerial Surveys. Courtesy HLW International LLP.

Given the realities of architectural practice in the 1950s, Walker understood that suburbanization and decentralization provided the new context for American design and he shifted the focus of his rhetoric to the need for good regional planning that integrated suburban and urban spaces. His energy went toward public advocacy rather than design as he lobbied for a controlled urban expansion based on the Garden City ideas of Sir Ebenezer Howard and Walker's contemporary and friend Sir Patrick Abercrombie, the author of the postwar Greater London Plan in 1944. Abercrombie's plans for London incorporated suburban new towns, a city perimeter greenbelt, and ring roads, attempting to control urban growth and preserve access to natural parks, themes that Walker increasingly embraced.[97] Walker was keenly attuned to the larger problems surrounding suburbanization and he joined a growing chorus of like-minded planners: "The bedroom town is a natural parallel to high densities of our major cities and the bedroom town in time strangles, economically, the center."[98]

Even as his own firm designed the suburban infrastructure that he increasingly decried, Walker used his positions as president of the AIA (1949–51) and as vice president of the Union Internationale des Architectes (UIA, 1948) to project his voice into discussions of urban development. He became an "architectural ambassador" and entered into the debates over the commission for UNESCO headquarters in Paris, the design of the United Nations building in New York, and new zoning laws for New York City.[99] He reviled the International Style and the work of Le Corbusier, Mies, and Gropius, especially the glass-skinned skyscrapers of the postwar period. Though he could do little to stop their construction, he presciently dismissed them as "glass-protected Venetian blinds."[100] On the other hand, as chairman of the Benjamin Franklin Foundation, he shepherded Hugh Stubbins's Berlin Congress Hall through its design and construction (though at times with a heavy hand). Stubbins was a former student of Gropius's at Harvard, and his designs for the Congress Hall used thin-shell concrete construction to create a swooping,

Figure 100. The varied scales of Fresh Meadows were designed to provide public space for recreation. This idyllic view shows one of the supervised playgrounds, located near the apartment buildings, with ample shade and seating for adults.

Photograph by Sigurd Fischer, ca. 1948. Courtesy HLW International LLP.

arced roof that earned the building the nickname "the pregnant oyster." The Congress Hall was part of the Interbau building exhibition of 1957, given by its American sponsors as a home that would foster free expression in postwar Germany through art, theater, and music. Walker's work with Stubbins also meant collaborating with Eleanor Dulles, the brilliant "Mother of Berlin" who oversaw American postwar reconstruction in the city (Fig. 101).[101] But Walker also criticized conservative classical practitioners like J. George Stewart, whose designs to extend the east front of the Capitol Building in Washington caused immense controversy. Walker was a member of the commission that defeated the plan, criticizing Stewart's imitation of "sentimental" forms of the past.[102] Ultimately Walker remained in between: a modernist on the wrong side of the avant-garde.

Figure 101. Ralph Walker and Eleanor Dulles in 1957 at the dedication ceremony for the Berlin Congress Hall, which was designed by Hugh Stubbins. A photograph of the building is in the background. Walker coordinated payment and contracts for the building through the Benjamin Franklin Foundation. The photograph is from a scrapbook Walker created to commemorate the Berlin project.

Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library.

In these critiques Walker was swimming ever harder against the current. He maintained a network of like-minded professionals, like Abercrombie in London, with whom he exchanged letters complaining of the rising influence of orthodox modernists. A favorite topic was Le Corbusier, considered by both to be a tyrannical and destructive influence in architecture. In a typical exchange, Abercrombie wrote to Walker, pleading for confidentiality: "It will rather amuse you to hear that I have been invited to visit Bogotá to clear up one of Corbusier's messes! He has left them with a 'Plan' that they can't use. This was exactly the case at Smyrna where they had an international competition following Corbusier's plan! . . . Please keep this quite private."[103] Another ally

Figure 102. Ralph Walker's office at Voorhees, Walker, Foley & Smith, 101 Park Avenue, ca. 1950. A map of Paris adorns the back wall and the credenza at rear has custom-made door pulls that form the letter "W." A rendering of MIT's Hayden Memorial Library is on the wall at right, and a model of the Irving Trust sits on the window sill at left. Courtesy HLW International LLP.

was Talbot Hamlin, venerable professor of architecture at Columbia, who still cited Walker in 1951 as a positive influence on American thinking about postwar city planning, along with Lewis Mumford.[104]

It was allies like these who positioned Walker as "Architect of the Century" at the one hundredth AIA convention in 1957. Held in Washington, D.C., the convention celebrated the role of architecture in shaping American society in the previous hundred years. Henry Luce, publisher of *Time*, *Life*, *Fortune*, and *Architectural Forum*, gave the keynote address, "Good Architecture is Good Government," celebrating the ways that architecture allowed the wheels of American capitalism to roll forward. Walker wrote and self-published two

books to celebrate the occasion: *Ralph Walker, Architect*, something of an autobiography, and *The Fly in the Amber*, a collection of lectures and essays. This was the pinnacle of Walker's career. He was surrounded by admiring colleagues who called him a "favorite and gifted son."[105]

For the most part, however, these allies were part of an aging generation of practitioners whose ideals had been formed during the 1920s. They had few followers, as Mies, Gropius, and Marcel Breuer had university positions and turned out scores of disciples. By the late 1950s, Walker's rhetoric was increasingly bitter and negative, describing the world's and architecture's shortcomings rather than pointing out solutions. The architect who had in the 1920s viewed the city as a dynamic, invigorating place now viewed it as a doomed, chaotic dystopia. The best thing about New York, he wrote, was leaving it at the end of the workday. Douglas Haskell, a long-time colleague since his days as editor at the architectural magazine *Pencil Points*, and later the patient and broad-minded editor at *Architectural Forum*, wrote Walker a perceptive entreaty in 1958: "One really does get some impression that you spend more time in deploring what you consider wrong trends than in giving a really firm outline and solid backing, in public, to a way of putting buildings together that could be considered yours."[106] The trouble was that Walker *had* outlined the way he believed buildings should be put together in the 1920s — and his vision had been rejected, even within his own firm.

Stephen Voorhees remained the controlling influence at Voorhees, Walker, Smith & Smith until the end — both men retired at the same time in 1959, Voorhees after an incredible forty-nine years as partner to Walker's thirty-three. Voorhees, practical and unengaged with Walker's political battles, had long had more day-to-day influence at the firm while Walker travelled to Washington, Paris, London, Buenos Aires, Venezuela, and other far-flung points. Voorhees brought in the business and hobnobbed with corporate executives. A list of projects underway around 1950 indicated that Voorhees was the supervising architect for seventy-eight job numbers and Walker for

forty-three, with junior partners handling more than either one. While Walker did handle some of the larger projects, including the top-secret "Project X," the design of the Argonne National Laboratory outside Chicago, he had relatively little design influence, even in his own firm, by the 1950s.[107] The "analyst of beauty" had little to analyze (Fig. 102).

What projects he did work on suffer by comparison to the art deco towers of the 1920s. Walker designed the Hayden Memorial Library at MIT beginning in 1946 (Fig. 103). It is a solid, competent design, with clear links to the combined modularity and streamlined rusticity of the Bell Labs design. But without ornament, the library lacked the spark of his earlier career. To maintain his sense of "humanism," Walker looked to light: "Like that old symbol of learning, the scholar's lamp, a library building at night should long continue to glow as a symbol to young and old alike."[108]

Figure 103. Voorhees, Walker, Foley & Smith, Hayden Memorial Library, MIT, Cambridge, Massachusetts, 1946–51. Walker's design for the library emphasized natural light for study tables near the large bay windows.
Courtesy MIT Libraries.

Controversy and Rediscovery

THE 1960S WERE TO BE A PAINFUL DECADE for Walker. His personal life was marred by difficulty — his wife, Stella, developed severe problems by the postwar period. Their nature is only alluded to in Walker's personal notes but Lysette, as Walker affectionately called her, was committed to the Four Winds Sanatorium in Westchester County in 1963.[109]

Adding to his personal distress, he also found himself under professional attack from his colleagues. On one level, controversy was nothing new to Walker. Since the 1920s he had publicly criticized and ridiculed the heroic figures of European modernism. To the generation of modernists that gained influence during the postwar period, architects like Walker were dinosaurs, their great works of the 1920s and 1930s outdated, sentimental, and conservative. The young George Nelson, for example, who after World War II became director of design for Herman Miller, left America and traveled to Europe for inspiration during the 1930s, interviewing rising masters like Mies and Le Corbusier rather than the giants of American practice.[110] Walker, never one to shy away from controversy, bridled under the growing influence of this new postwar generation and he continued to publicly excoriate the work of major public figures like Walter Gropius, Marcel Breuer, and Le Corbusier, calling them names like "Schleiermachers," or nihilist "veilmakers."[111] Walker's targets returned fire. Breuer wrote Walker an angry and condemning letter; Serge Chermayeff, a colleague of Gropius's at Harvard's Graduate School of Design and a fellow émigré from war-torn Europe, gave a public address in Chicago that ridiculed Walker and the policies he promoted as president of the AIA.[112]

But when an attack came from the AIA itself, the organization that had provided the foundation for Walker's professional accomplishments, it was too much to bear. Burned by a professional censure that the AIA's administration dealt to his firm, Walker resigned in protest in 1961, just four years after becoming its "Architect of the Century" and ten years after establishing its prestigious College of Fellows and serving as its first chancellor. While the details of the controversy remain obscure, it now appears that Walker's firm aggressively pursued the contract for the design of the SUNY-Stony Brook campus when another firm believed the contract to be theirs; Voorhees and Walker had long been consultants to the SUNY system. While technically an unethical business practice according to AIA standards, this was (and is) a common occurrence and it is puzzling why the AIA decided to punish the firm in such a draconian fashion. Letters hint at a personal vendetta by Philip Creer, a member of the committee that recommended censure. Creer had spent many years at the Rhode Island School of Design and was dean of the architecture school at the University of Texas. A colleague privately accused him of persecuting Walker for personal reasons. But most people tried to stay out of the ensuing very public drama. Walker self-published a rambling defense of his firm's actions and attacked the AIA, sending a copy of the booklet to every AIA member. In so doing he burned what had been his strongest bridge to the profession — though he was eventually reinstated as an honorary member.[113]

By the end of the 1960s, Walker was isolated and though he still visited his architecture offices in Manhattan almost daily up to his death in 1973, he spent much of his time writing at his home, Walkerburn, in Chappaqua. He collected ephemera by T. S. Eliot and indulged in poetry himself, writing heartfelt free verse and becoming ever more disconnected from new currents in architecture (Fig. 104). Douglas Haskell, editor of *Architectural Forum*, still a faithful correspondent, sent Walker a photograph of Mathias Goeritz's towers at Luis Barragán's new Satellite City in Mexico City in 1962 and Walker acerbically replied, "No comment!"[114]

In 1973, Walker was reportedly diagnosed with brain cancer. Office legend has it that he came into the offices of Haines, Lundberg & Waehler (as the firm was then known) one morning to check in and chat with his former colleagues. Later that day, he went home to Walkerburn and committed suicide.[115] Ever the dramatic iconoclast, Walker had years before recorded his own remarks to be played at his funeral service. In them he declared: "The one thing which is common to us all is the wonderment underlying the orderliness of the universe . . . [I] hope that I might be remembered by all of you for goodness."[116]

Even at the moment of Walker's death, that remembrance of "goodness" had begun. Ignored for nearly forty years, New York's art deco towers of the 1920s began to percolate in the public realm. Postmodernism made it fashionable to look at ornament again and Rosemarie Haag Bletter and Cervin Robinson's ground-breaking consideration of art deco skyscrapers, *Skyscraper Style*, appeared in 1976. Rem Koolhaas's 1978 *Delirious New York* explored the city's stepped skyscrapers as exemplars of an exuberant "Manhattanism" that could fuel a new era of design. By 1980, the Art Deco Society of New York formed and the tide had turned. Paul Goldberger's popular book *The Skyscraper* (1981) returned the art deco buildings of the 1920s to the narrative of tall buildings in New York. In *New York 1930*, Robert A. M. Stern gave Walker a place as one of the "Three Modern Masters" of the skyscraper. Andrew Dolkart's guide to the buildings of lower Manhattan highlights the Irving Trust as one of the great landmarks of art deco architecture in the city.[117] Recent exhibitions, like "The Rise of Wall Street," organized by Carol Willis and held at the Skyscraper Museum in 2010 and "Walls Speak," organized by Cathy Brawer and St. Bonaventure University, and held at the National Building Museum in 2011, returned attention to Walker's masterpiece at One Wall Street. Though heavily damaged in the terrorist attacks of September 11, The Barclay-Vesey Building was lovingly restored brick by brick to its former glory.[118] Walker's 1920s telephone buildings in New York, largely decommissioned by Verizon as technology moves to wireless communication, find new life as private aeries for

viewing the city. Frank Gehry's new 8 Spruce Street, with its rippling curtain walls, testifies to a new moment in architecture when texture and expressive metaphor again fuel innovative design.

Ralph Walker was a gifted designer who transformed his firm's practice and believed passionately in the power of architecture to create humane, beautiful environments for city dwellers. The collaborations that fueled his designs helped forge a new language for architecture at a critical moment in American history. That language was a distinct form of American modernism rooted in a profound respect for the people who used buildings and the people who made them as well. In designing his buildings for "pattern-loving humanity" Walker searched for a means of intertwining creativity with mass production. "A good workman is not anonymous," he wrote; "the human mind, the human hand, are fundamental to the making of the machine."[119] In striking a humanist balance between the hand and the machine, Walker became both a modern master and an architect of the century.

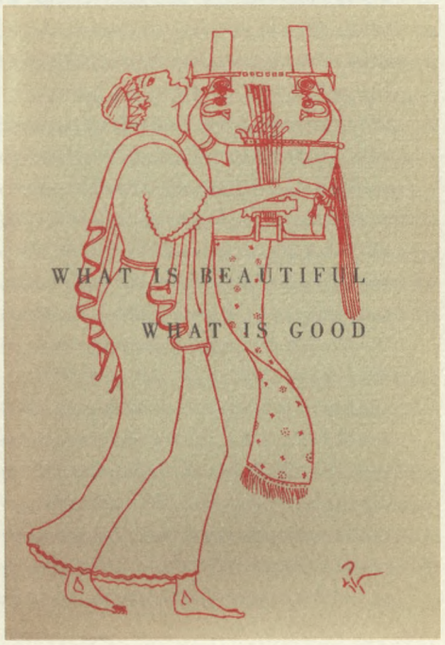


Figure 104. Walker's cover design for one of the pamphlets he published during the 1960s after his retirement: What Is Beautiful, What Is Good *(1965).* *Private collection.*

Notes

ABBREVIATIONS

AIA	American Institute of Architects
HLW	HLW International LLP, New York
NYT	New York Times
RTW	Ralph Thomas Walker

1 "Architect of the Century: Ralph Thomas Walker," *NYT*, 17 May 1957, 26.

2 "Centennial Medal of Honor," pamphlet issued by the American Institute of Architects, Washington, D. C., 1957. HLW Archives, New York.

3 Walker specifically corrected the quote in a letter to Carl Stern, writing, in reference to being awarded the centennial medal: "Mies is strangely silent; so is Frank Lloyd Wright, who was somewhat misquoted. What he really said was that I was the 'only other honest architect in America'." RTW to Carl Stern, 5 June 1957, HLW Archives.

4 Bevis Hillier is generally credited with coining the term "art deco;" see Hillier, *Art Deco* (London: Studio Vista, 1968). See John Moffitt's review of the book for an initial reaction to the term's usage: *Art Journal* 28, n.3 (Spring 1969): 349–50. The history and usage of the term "art deco" for architecture is well summarized in David Gebhard, *The National Trust Guide to Art Deco in America* (New York: John Wiley & Sons, 1996), 2–3.

5 The lunches at Mori's Italian restaurant are alluded to in Walter H. Kilham, Jr.'s *Raymond Hood, Architect: Form Through Function in the American Skyscraper* (New York: Architectural Book Publishing Company, 1973) and described by Walker in an unpublished autobiographical essay "Each Day Anew," typescript, pp. 5–7. Box 1, Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library. Walker wrote tributes to both Hood and Urban upon their deaths. An essay on Urban was published: "Joseph Urban, the Man," *Architecture* 69 (May 1934): 271–72, and long sections on each appear in "Each Day Anew." On Kahn, see the comprehensive monograph by Jewel Stern and John A. Stuart, *Ely Jacques Kahn, Architect: Beaux-Arts to Modernism in New York* (New York: W. W. Norton, 2006).

6 Howard Robertson, "The Barclay-Vesey Telephone Building, New York," *Architect & Building News* 117 (7 January 1927): 34.

7 The story of Stubbins's Congress Hall is told by Steffen de Rudder, *The Architect Hugh Stubbins: Fifties American Modernism in Berlin* (Berlin: Jovis, 2007).

8 Harold Bush-Brown, a contemporary of Walker's, penned a personal remembrance of the advent of International Style modernism that sheds light on the use of the word "clean" as a characteristic of the modern. Harold Bush-Brown, *Beaux-Arts to Bauhaus and Beyond: An Architect's Perspective* (New York: Whitney Library of Design, 1976).

9 Huson Jackson, *New York Architecture 1650–1952* (New York: Reinhold, 1952), 64. The dismissal is more ironic given that the guide was produced for the AIA convention held in New York in 1952, organized under the leadership of Ralph Walker during his AIA presidency from 1949 to 1951.

10 The best sources of biographical information on Walker are the Ralph T. Walker Papers, Special Collections Research Center, Syracuse University Library. Meredith Arms Bzdak's dissertation was the first to examine those papers to assess Walker's career, "The Architecture of Ralph Thomas Walker, 1919–1939" (PhD dissertation, Rutgers University, 1995). An appreciative essay on Walker can also be found in Robert A. M. Stern, *New York 1930: Architecture and Urbanism Between the Two World Wars* (New York: Rizzoli, 1987).

11 Obituary, Howard K. Hilton, A.A.I.A., *Quarterly Bulletin of the AIA* X, n.2 (July 1909): 133–34.

12 RTW, "Each Day Anew," 4. Box 2, Walker Papers, Syracuse University.

13 On the early program at MIT, see J. A. Chewning, "William Robert Ware at MIT and Columbia," *Journal of Architectural Education* 33, n. 2 (November 1979): 25–29. Mary N. Woods, *From Craft to Profession: The Practice of Architecture in Nineteenth-Century America* (Berkeley: University of California Press, 1999) outlines the origins of American architectural education.

14 On Urban's theater productions see Arnold Aronson, *Architect of Dreams:The Theatrical Vision of Joseph Urban* (New York: Miriam and Ira D. Wallach Art Gallery, 2001).

15 In 1913, while Walker worked in their office, the firm was designing the Whalen Building in Thunder Bay, a steel-frame building clad in white terra-cotta, and covered in a profusion of ornament, including lions, shields, and human heads. The Canada Life Assurance Building, completed in 1914 in Regina, had dramatic emphasis on the its vertical elements, combining Renaissance ornamental details with a modern understanding of the tall office building inspired by Louis Sullivan. While in Montreal he also studied drawing with Francis Swales, an architect trained at the Ecole des Beaux-Arts. Swales later moved to New York and became an editor at *Pencil Points* when it began publication in 1920.

16 The 1910 Census for Rhode Island lists a Delia Forbes, aged 57, as head of household, living in a rented home at 62 Church Street in Providence with five children, two daughters and three sons: Margaret, 30, a jeweler; Stella, 28, a stenographer for an architect; James, 26, a jeweler; Charles, 23, a clerk for a bowling alley; and William, a store clerk. The family was second-generation Irish Catholic, both parents born in Massachusetts.

17 *The Rotch Travelling Scholarship: A Review of Its History, 1883–1963* (Boston: Rand Press, 1963), and Hugh Stubbins, comp., *The Rotch Travelling Scholarship* (Boston: The Rotch Travelling Scholarship, Inc., 1980).

18 The headquarters of 40th Engineers returned to US from France on January 24, 1919 aboard the Goentoer. For perspective on Walker's activities in the Camouflage Section, see: "Faking as an Art in Conducting War," *NYT*, 24 June 1917, 35; "Art Notes: An Exhibition by the Sculptors Who Are Now in Uniform," *NYT*, 17 December 1917, 11; "Camouflage Now a Regimental Essential," *NYT* , 26 May 1918, SM4; Katherine McNamara, "Recent References on Camouflage," *Landscape Architecture* 32, n.4 (July 1942): 169–172.

19 RTW, "WWI," unpublished ts. Box 14, Walker Papers, Syracuse University.

20 Estimates of billing are based on published contract amounts in the NYT buildings section: "$1,000,000 Telephone Exchange," *NYT*, 10 February 1920, 26; "Telephone Company to Enlarge Building," *NYT* 21 April 1920; "New Telephone Exchange," *NYT*, 2 May 1920, RE2; "Varick Street Destined as Great Centre for Business Activity and Tall Buildings," *NYT*, 18 July 1920, 92; "Big Alterations Planned," *NYT*, 19 August 1920, 26. The history of the Western Electric Buildings, now West Beth Artists' Housing, is covered in Jay Shockley, "Bell Telephone Laboratories Complex," New York Landmarks Preservation Commission Report LP-2391, 25 October 2011. HLW, today's successor firm to McKenzie, Voorhees & Gmelin, has thusfar been unable to locate all job files and billing files from this period. They will, perhaps, turn up, but for the present it suffices to understand that the firm did extremely well financially.

21 RTW, "New York Telephone Building," unpublished ts., pages 2–3. Box 1, Walker Papers, Syracuse University.

22 The *NYT* published a special supplement on the building on January 1, 1905, covering every aspect of its design. See also Sarah Landau and Carl Condit, *The Rise of the New York Skyscraper, 1865–1913* (New Haven: Yale University Press, 1996), 311–14.

23 On Cyrus Eidlitz, see Montgomery Schuyler, "Cyrus L. W. Eidlitz," *Architectural Record* 5 (April–June 1896): 411–35 and Kathryn E. Holliday, *Leopold Eidlitz: Architecture and Idealism in the Gilded Age* (New York: W. W. Norton, 2008). On Andrew McKenzie see, Obituary, *Pencil Points* (1926); "A.C. M'Kenzie Dies; Noted Architect," *NYT*, 11 October 1926, 21.

On Voorhees see *Stephen F. Voorhees Eightieth Birthday* (New York: Aldus Printers, 1958) and "Stephen Francis Voorhees, 86, Designer of Skyscrapers, Dies," *NYT*, 25 January 1965. Stephen Francis Voorhees was born in Rocky Hill, New Jersey and was part of the patrician Voorhees clan that traced its roots to Steven Coerte van Voorhees, an seventeenth-century Dutch immigrant to New Amsterdam. He joined Cyrus Eidlitz 's firm in 1900 and recalled that Andrew McKenzie hired him, becoming partner with McKenzie in 1910 when Eidlitz retired. He served in the Surgeon General's office of the Army as Officer in charge of hospital design 1917–19, was president of the American Institute of Architects (1936–37), and became supervising architect for Princeton University in 1930.

Information on Gmelin is relatively scarce, see "Paul Gmelin Dead," *NYT*, 21 November 1937, 8; and RTW, "New York Telephone Building," unpublished ts., 5. Box 1, Walker Papers, Syracuse University. Paul Theodor Gmelin was born in Ulm, Germany in 1858 and educated in Stuttgart. German immigration records indicate he arrived in the U. S. in 1892 (Wuerttemberg, Germany Emigration Index. Provo: Ancestry.com Operations Inc, 1997). As Cyrus Eidlitz had also studied at Stuttgart, this perhaps paved the way for his employment in the Eidlitz office, where building contracts indicated he was working by the mid-1890s (HLW Archives). Anti-German sentiment during World War I apparently distressed him and his wife tremendously and Walker's arrival at the firm in 1919 unseated Gmelin as the primary designer.

24 RTW, "The Relation of Skyscrapers to Our Life," *Architectural Forum* 52 (May 1930): 695.

25 In his review of the telephone building, Lewis Mumford called the Barclay-Vesey Building and the Shelton Hotel the two examples of the most modern buildings built in New York. Mumford, "Barclay-Vesey Building," *New Republic* (6 July 1927): 176–77.

26 Howard Robertson, "The Barclay-Vesey Telephone Building, New York," *Architect & Building News* 117 (7 January 1927): 34.

27 Pennell as quoted in "The New Telephone Building at 140 West Street," *Telephone Review* 17 (September 1926): 322.

28 The strange choice of image is considered in Mardges Bacon, *Le Corbusier in America: Travels in the Land of the Timid* (Cambridge, MA: MIT Press, 2001), 17–18.

29 On the Barclay-Vesey Building, see Stern, *New York 1930*, 565; Bzdak, "Architecture of Ralph Thomas Walker," 69–89; and Margaret M.M. Pickart, "Barclay-Vesey Building, First Floor Interior," and "Barclay-Vesey Building," New York Landmarks Preservation Commission Designation Reports LP-1745 and LP-1746, 1 October 1991.

30 "205,000 New Phones Installed in 1924," *NYT*, 19 January 1925, 9.

31 On the history of the telephone in the United States see Claude S. Fischer, *America Calling: A Social History of the Telephone to 1940* (Berkeley: University of California Press, 1992).

32 "The New Telephone Building at 140 West Street," *Telephone Review*, 321.

33 Consolidation was considered more economical in large cities; see U. N. Bethell, "Costs More per Station to Furnish Telephone Service in a Large City than in a Small Town," *Telephone Magazine: An Illustrated Monthly Magazine* 11 (1898): 238–39. Bethell's early discussion of telephone infrastructure in a dense city clearly distinguishes between the roles of consolidated central offices and smaller, more local exchanges.

34 For a full account of the competition, see Katherine Solomonson, *The Chicago Tribune Tower Competition: Skyscraper Design and Cultural Change in the 1920s* (Chicago: University of Chicago Press, 2003).

35 The origins and impact of the 1916 Zoning Resolution are fully discussed in Carol Willis, *Form Follows Finance: Skyscrapers and Skylines in New York and Chicago* (New York: Princeton Architectural Press, 1995).

36 Carol Willis, "Zoning and Zeitgeist: The Skyscraper City in the 1920s," *Journal of the Society of Archi-*

tectural Historians 45, n.1 (March 1986): 54. See also Willis's introduction to the reprint of Hugh Ferriss, *The Metropolis of Tomorrow* (New York: Princeton Architectural Press, 1986, orig. ed. 1929).

37 Placement of equipment and personnel in the building is taken from "Manhattan Building and Equipment Data," a report produced by the Engineering Department of New York Telephone in January 1965.

38 Mumford, "Barclay-Vesey Building," 176–77. See also Mumford's follow-up letter to the editor, *New Republic* (24 August 1927), 21.

39 Mumford, "Barclay-Vesey Building," 177.

40 The origins and context of art deco have recently received much needed research. See especially the exhibition catalogs by Charlotte Benton, Tim Benton, and Ghislaine Wood, *Art Deco, 1910–1939* (London: Bulfinch, 2003) and Wendy Kaplan, *Designing Modernity: The Arts of Reform and Persuasion, 1885–1945* (London: Thames & Hudson, 1995).

41 Louis Sullivan, *A System of Architectural Ornament* (New York: American Institute of Architects, 1924); David van Zanten, *Sullivan's City: The Meaning of Ornament for Louis Sullivan* (Chicago: University of Chicago Press, 2000); Claude Bragdon, *The Beautiful Necessity* (Rochester, NY: Manas Press, 1910); Jonathan Massey, *Crystal and Arabesque: Claude Bragdon, Ornament and Modern Architecture* (Minnesota: University of Minnesota Press, 2009).

42 On Mumford, see Robert Wojtowicz, *Lewis Mumford and American Modernism* (Cambridge: Cambridge University Press, 1998); on the New Humanism see Christopher Newfield, *Ivy and Industry: Business and the Making of the American University, 1880–1980* (Durham, N.C.: Duke University Press, 2003); J. David Hoeveler, Jr., *The New Humanism: A Critique of Modern America, 1900–1940* (Charlottesville: University Press of Virginia, 1977); and Norman Foerster, *Humanism and America: Essays on the Outlook of Modern Civilisation* (New York: Farrar & Rinehart, 1930).

43 RTW, "The Relation of Skyscrapers to Our Life," *Architectural Forum* 52 (May 1930): 691.

44 RTW, "Relation of Skyscrapers," 694.

45 On the Salvation Army see Diane Winston, *Red-Hot and Righteous: The Urban Religion of the Salvation Army* (Cambridge, MA: Harvard University Press, 1999).

46 "Preliminary Report on the Erection of the Territorial Headquarters Buildings," Voorhees, Gmelin & Walker, August 1927, Salvation Army National Archives, Alexandria, VA.

47 Chester Price played a key role in interpreting Walker's aesthetic. As the primary draftsman for the firm from the 1920s until the 1950s, Price did everything from initial study sketches to final presentation drawings. Price was born in St. Louis in 1885, graduated from the Manual Training High School in 1904 and studied architecture at Washington University between 1903 and 1906. After winning a traveling fellowship from the Architectural League and working for several New York firms, he opened his own architectural illustration office in 1919. He worked a great deal for Voorhees, Gmelin & Walker and in 1950 became an employee of the firm Voorhees, Walker, Smith & Smith. A collection of Chester Price's drawings and papers is held by the Avery Library; biographic information is taken from an undated typescript biography written after his death and a personnel questionnaire from Voorhees, Walker, Smith & Smith dated 1958.

48 On the construction of the Eighth Avenue subway, which was financed as an independent line by the city, see Clifton Hood, *722 Miles: The Building of the Subways and How They Transformed New York*, centennial ed. (Baltimore: Johns Hopkins University Press, 2004).

49 Information about the location of employees throughout the buildings comes from "Manhattan Building and Equipment Data."

50 Descriptions of the New York Telephone Company's corporate culture and policies can be found throughout the print run of the *Telephone Review*, an in-house publication for employees.

51 For Walker's understanding of Urban see Walker's "Joseph Urban the Man;" a sampling of Urban's ideas can be found in Joseph Urban, "Architecture Must Reflect Modern Life," *New York American*, 14 April 1928; and his "Happiness Depicted in Ziegfeld Theatre," *New York Telegraph*, 6 February 1927, 12. On Urban see Mary Beth Betts, "The American Architecture of Joseph Urban" (Ph.D. diss, City University of New York, 1999); Randolph Cole, *Joseph Urban: Architecture, Theatre, Opera, Film* (New York: Abbeville Press, 1992).

Notes

52 On the Western Union Building see Betsey Bradley, "Western Union Building," New York Landmarks Preservation Commission Report LP-1749, 1 October 1991.

53 "'I said it – fifty years ago; masonry of all kinds is still a very desirable method of construction with many virtues and some faults.' Certainly if you want long endurance at reasonable maintenance costs, as well as initial small capital investment, the masonry wall still shows to advantage." RTW, "Masonry Walls in Modular Dimensions," unpublished ts., 3, talk given to the Building Research Institute Conference, 9 September 1956. Box 2, Folder: Speeches, 1955–56, Walker Papers, Syracuse University.

54 Walker's sketches for furniture for the Metropolitan Museum of Art industrial arts exhibits are in the Walker Papers, Syracuse University. See also Marilyn F. Friedman, *Selling Good Design: Promoting the Early Modern Interior* (New York: Rizzoli, 2003); Christine Wallace Laidlaw, "The Metropolitan Museum of Art and Modern Design: 1917–1929," *Journal of Decorative and Propaganda Arts* 8 (Spring 1988): 88–103; and the exhibit catalog *Forward House* (New York: Architectural Forum and Macy's, 1933).

55 RTW, "Creative Individualism," *Pencil Points* 17 (September 1936): 503–4.

56 "New Building to Be Highest in Rochester," *Rochester Times-Union*, 27 June 1929, 1; "What Public Will See at Genesee Valley Trust Opening Monday," *Rochester Times-Union*, 27 September 1930, 12.

57 "World's Costliest Real Estate Plot Sold," *NYT*, 19 January 1926, 2. The development of Wall Street and the skyscrapers built there during the 1920s is covered in Daniel Abramson, *Skyscraper Rivals: The AIG Building and the Architecture of Wall Street* (New York: Princeton Architectural Press, 2001) as well as by the Skyscraper Museum's online exhibit "The Rise of Wall Street" <http://skyscraper.org/EXHIBITIONS/WALL_STREET/1_wall.php>

58 On the Woolworth Building see Gail Fenske, *The Skyscraper and the City: The Woolworth Building and the Making of Modern New York* (Chicago: University of Chicago Press, 2008).

59 Interview with Christine McKay, Archivist, BNY Mellon, 13 July 2011.

60 "Irving Trust Co. Moves March 23," *NYT*, 16 March 1931, 15.

61 Drawings and photographs elaborating the fabrication process of the cladding and window frames are held in the corporate archives of HLW International LLP.

62 Eugene Clute, "Glass Mosaic," *Architecture* 64 (September 1931): 141.

63 Ralph Walker on Meière, quoted in Ernest W. Watson, "Hildreth Meière, Mural Painter," *American Artist* 2 (September 1941): 5. My thanks to Hilly Dunn for supplying a copy of this article.

64 On Meière see Catherine Brawer, *Walls Speak: The Narrative Art of Hildreth Meière* (Bonaventure, NY: St. Bonaventure University, 2009). The exhibit also traveled to the National Building Museum in Washington, D.C. in 2011.

65 Clute, "Glass Mosaic," 141.

66 Hildreth Meière, "Symbolism of Lobby Ceiling," undated ts., BNY Mellon Archives, New York. Courtesy Louise Meière Dunn and Hilly Dunn.

67 Eugene Clute and David Comstock, "How Voorhees, Gmelin and Walker Handle Interior Decoration," *American Architect* 140 (1931): 44, 76. Comstock was head of interior design for Voorhees, Gmelin & Walker at the time the article was written. For broader context on the origins of interior design as a professional design discipline, see Grace Lees-Maffei, "Introduction: Professionalization as a Focus in Interior Design History," *Journal of Design History* 21 (2008): 1–18.

68 Eugene Clute, "These Designs Were Based on Modern Veneer Construction," *American Architect* 140 (September 1931): 37.

69 "M'Kee to Plan Work for Jobless Today to Ease April Crisis," *NYT*, 2 March 1930, 1.

70 "Remarks by Mr. Pierson," 20 March 1931. BNY Mellon Archives, New York. Elsewhere in his speech Pierson dreamed of "the years of even greater possibilities of accomplishment which would seem to stretch on ahead."

71 "Remarks by Mr. Voorhees," 20 March 1931. BNY Mellon Archives, New York.

72 Lewis Mumford, "The Modern Hospital," *New Yorker* 7 (9 December 1931), reprinted in Robert Wojtowicz, *Sidewalk Critic: Lewis Mumford's Writings on New York*, 65.

73 "Reports of Comments Made by Visitors," 30 March 1931 and "Summary of interview with Floorman Dotterer," 23 March 1932, BNY Mellon Archives, New York.

74 Statistics are taken from L. Seth Schnitman, "Building Trends and Outlook," *Architectural Record* 72 (July 1932): 72 as well as the montly "Building Trends" columns published in 1937. Gabrielle Esperdy, *Modernizing Main Street: Architecture and Consumer Culture in the New Deal* (Chicago: University Press, 2008) explores federally sponsored programs that brought small jobs to architects.

75 Interview with Ted Hammer, HLW International LLP, New York, 7 July 2010.

76 On the World's Fairs see Lisa D. Schrenck, *Building a Century of Progress: The Architecture of Chicago's 1933–34 World's Fair* (Minneapolis: University of Minnesota Press, 2007); Cheryl R. Ganz, *The 1933 Chicago World's Fair: Century of Progress* (Urbana: University of Illinois Press, 2008); Robert Rosenblum et al., *Remembering the Future: The New York World's Fair from 1939–1964* (New York: Rizzoli, 1989); Robert W. Rydell, ed., *Designing Tomorrow: America's World's Fairs of the 1930s* (New Haven: Yale University Press, 2010).

77 Terry Smith, *Making the Modern: Industry, Art and Design in America* (Chicago: University of Chicago Press, 1993), 379. On streamlining see also Jeffrey Meikle, *Twentieth Century Limited: Industrial Design in America, 1925–1939* (Philadelphia: Temple University Press, 1979).

78 On the International Style see Henry-Russell Hitchcock and Philip Johnson, *The International Style* (New York: WW Norton, 1932) and Terence Riley, *The International Style: Exhibition 15 and the Museum of Modern Art* (New York: Rizzoli, 1992).

79 For more on the Tower see RTW, *World's Fair Architecture* (New York: Voorhees, Walker, Smith, Smith & Haines, 1960); and "Architecture Molds a New World's Fair," *NYT Sunday Magazine* (19 October 1930), 2–3, 18; and Forrest Crissey, "Chicago's Century of Progress Exposition," *Saturday Evening Post* (28 March 1931), 33, 35.

80 "'Floating' Sphere to Dominate Fair," *NYT*, 16 March 1937, 25.

81 Voorhees had been president of the AIA in 1936–37 and was appointed Chairman in May 1936, "Board of Design Is Named for Fair," *NYT*, 22 May 1936, 25; he travelled to Paris in 1937 to visit the World's Fair there with Grover Whalen, president of the Fair corporation, and Percy Straus, chairman of the fair committee on architecture and physical planning. "Fair Group to Sail," *NYT*, 25 April 1937, 53. Voorhees ensured that designers from his firm received work; Perry Coke Smith won third prize in an early design competition: "World Fair Awards Made for Designs," *NYT*, 11 November 1936, 24. In his public talks about the fair, Voorhees echoed Walker's sentiments about the need for "spiritual" and "cultural" meaning in architecture: "Architect Stresses Spiritual Concepts," *NYT*, 12 July 1936, RE3. The firm also designed three unbuilt pavilions for the fair for Elizabeth Arden, Devoe & Reynolds Paint, and Marine Midland Banks.

82 RTW, *Ralph Walker, Architect* (New York: Aldus Printers, 1957), 88.

83 Accounts of Voorhes, Gmelin & Walker's pavilions, which are not much discussed in the literature on the 1939 World's Fair, are taken from RTW, *Ralph Walker, Architect*, 84–111 and Voorhees, Walker, Smith, Smith & Haines, *World's Fair Architecture* as well as the extensive photo-documentation of the New York World's Fair collections at the New York Public Library, now available online at: http://www.nypl.org/archives/1724

84 RTW, "The Birth of an Idea," and Fred Waller, "Cinerama Goes to War," in Martin Quigley, Jr., ed., *New Screen Techniques* (New York: Quigley Publishing Company, 1953), 112–125; "Cinerama – The Broad Picture," *Fortune* (January 1953): 92–93, 144–50.

85 Voorhees, Walker, Smith, Smith & Haines, *World's Fair Architecture*, 19.

86 On the Futurama, see Norman Bel Geddes, *Magic Motorways* (New York: Random House, 1940); Meikle, *Twentieth Century Limited*, especially chapter nine; Roland Marchand, "The Designers Go to the Fair II: Norman Bel Geddes, the General Motors 'Futurama,' and the Visit to the Factory Transformed," *Design Issues* 8, n.2 (Spring 1992): 22–40.

87 Willis, *Form Follows Finance*, 138.

88 RTW, *Ralph Walker, Architect*, 189.

89 For more on Bell Labs relationship to subsequent research laboratory design see Stuart Leslie and Scott Knowles, "'Industrial Versailles': Eero Saarinen's Corporate Campuses for GM, IBM, and AT&T," *Isis* 92 (March 2001): 1–33. An alternate reading is provided in William Rankin, "The Epistemology of the Suburbs: Knowledge, Production, and Cor-

porate Laboratory Design," *Critical Inquiry* (Summer 2010): 771–806.

90 RTW, *Ralph Walker, Architect*, 189.

91 Don Graf, *Convenience for Research* (New York: Voorhees, Walker, Foley & Smith, 1944). Firm records indicate Walker managed the production of the book. Graf had written for *Pencil Points*, providing their data sheets, since the mid-1930s.

92 For the firm's postwar projects, the best source of documentation is the series *Perspectives*, self-published by the firm from the 1950s to the 1960s. Detlef Martin, *The Organizational Complex: Architecture, Media, and Corporate Space* (Cambridge, MA: MIT Press, 2003) explores the larger context for the decentralization of corporate architecture.

93 In 1956 Walker declared that "a truly great corporation can well pay for an increase of the beauty in the environment of its buildings." "City Planning and Architecture Today," public address to AT&T's Regional Building Engineers, 23 May 1956, unpublished ts., 5. Box 2, Folder: Speeches, 1955–56, Walker Papers, Syracuse University.

94 From a 1952 address to UNESCO, printed in RTW, *Ralph Walker, Architect*, 146.

95 "Housing Contract Is Let," *NYT*, 1 July 1946, 45; Lee E. Cooper, "N. Y. Life's Colony with 3,000 Suites Is 50% Completed," *NYT*, 29 August 1948, R1. The firm's initial studies for New York Life emphasized a balance between economic feasibility and amenities like increased privacy, fireproof construction, and flexible site planning. See Voorhees, Walker, Foley & Smith, "Housing Unit Study, New York Life Insurance Company," 1945, New York Life Insurance Archives.

96 Lewis Mumford, "From Utopia Parkway Turn East," *New Yorker* (22 October 1949), 102; see also Robert A. M. Stern and John Massengale, *The Anglo American Suburb* (New York: Academy Editions, 1986), 48–52.

97 Sir Patrick Abercrombie and J. H. Forshaw, *County Plan of London* (London: Macmillan, 1943) and Sir Patrick Abercrombie, *Greater London Plan 1944* (London: H. M. Stationery Office, 1945).

98 RTW, *Ralph Walker, Architect*, 60. For the context for postwar discussion of planning see Andrew M. Shanken, *194X: Architecture, Planning and Consumer Culture on the American Home Front* (Minneapolis: University of Minnosota Press, 2009).

99 The heading of a profile of Walker in "Citizens and Architects," *Architectural Forum* 110 (January 1959): 90.

100 RTW to Douglas Haskell, 15 January 1958. Box 22, Folder 8, Douglas Putnam Haskell Papers, 1915–1979. Avery Architectural and Fine Arts Library, Drawings & Archives Department, Columbia University.

101 Dulles's brother, John Foster Dulles, was President Eisenhower's secretary of state; her other brother, Allen Welsh Dulles, was director of the Central Intelligence Agency under Eisenhower and Kennedy. Leonard Mosley, *Dulles: A Biography of Ellen, Allen, and John Foster Dulles and Their Family Network* (New York: Dial Press, 1978); Eleanor Lansing Dulles, *Berlin: The Wall Is Not Forever* (Chapel Hill: University of North Carolina Press, 1967).

102 RTW, "If this Be Sentiment" (1958), pamphlet containting text from an article that appeared in the *Journal of the American Institute of Architects*, HLW Archives.

103 Sir Patrick Abercrombie to RTW, 17 July 1958, Walker Papers, Syracuse University. Trading quotes from T.S. Eliot about Breuer's designs for UNESCO "a honeycomb section on end," Eliot quoted by Abercrombie in a letter to RTW, 27 November 1952, Walker Papers, Syracuse University.

104 Talbot Hamlin to Douglas Haskell, 20 April 1951. "Let us broadcast not only to England, but to this country as well the lessons Lewis Mumford is teaching and that Ralph Walker is pointing up." This letter was in response to the *Architectural Review* (London) of January 1951, which was quite controversial in its presentation of American city planning. Box 2, Folder 3, Haskell Papers, Avery Library, Columbia University.

105 Text of Centennial Medal of Honor certificate, reproduced in a program the AIA produced for the ceremony. HLW Archives. RTW, *Ralph Walker, Architect* (New York: Henahan House, 1957) and RTW, *The Fly in the Amber* (New York: Aldus Printers, 1957).

106 Douglas Haskell to RTW, 10 February 1958. Box 22, Folder 7, Haskell Papers, Avery Library, Columbia University. The rest of the letter: "Younger people are very quick to sense anything like that. In your own shop with the students whom you so generously train, you do take all the time and all the patience needed to achieve positive results. But this is not what emerges as the main impression from the book.

The impression of something vigorous and positive developing was very strong among young creative people in the earlier days, the days of the Telephone Building, Irving Trust, etc., etc. Your leadership is emerging again in the activities of the State Department, in city planning about which the younger generation is becoming alert, and in other directions. This is giving your former critics like me great pleasure. In many related undertakings we wouldn't know what to do without you. . . . Please forgive me if as a younger man I have sounded presumptuous in this letter."

107 "Project List," undated ts., ca. 1950, 17 pages, HLW Archives.

108 RTW, *Ralph Walker, Architect*, 162.

109 Walker described his wife as "bitter toward men in general and me in particular," and described "despair" and "violent outbursts." RTW, transcript of remarks made at the memorial service for Stella Forbes Walker, 2 February 1972, HLW Archives. An inventory of papers in Walker's office includes physicians' certificates and court certifications from 1963 declaring Stella Forbes Walker mentally ill. HLW Archives.

110 Nelson's interviews, originally published in *Pencil Points* in the 1930s, have been collected in George Nelson, *Building a New Europe: Portraits of Modern Architects* (New Haven: Yale University Press, 2007).

111 RTW, "The Education Necessary to the Professional Practice of Architecture," *AIA Journal* 15 (March 1951): 119–25.

112 Marcel Breuer to RTW, 19 March 1951, Series 2 Correspondence, Reel 5711, Frame 1074, Marcel Breuer Papers, Archives of American Art, Smithsonian Institution, Washington, D.C. and Serge T. Chermayeff, "The Profession of Architecture" (1950) in Richard Plunz, ed., *Design and the Public Good: Selected Writings, 1930–1980* (Cambridge, MA: MIT Press, 1982).

113 RTW, *The American Institute of Architects, 1921–1961* (New York: Aldus Printers, 1961); Aldus was the in-house publishing group of Walker's firm. Hugo Leipziger-Pearce, a faculty member at the University of Texas Austin School of Architecture, tried to pry information out of Douglas Haskell about Creer, of whom he was extremely skeptical. Haskell refused to take the bait, writing that the matter was too complicated to comment on. Hugo Leipziger-Pearce to Douglas Haskell, 5 June 1961, and Haskell to Leipziger-Pearce, 8 June 1961. Box 12, Folder 6, Haskell Papers, Avery Library, Columbia University.

114 RTW to Douglas Haskell, 8 May 1962. Box 41, Folder 14, Haskell Papers, Avery Library, Columbia University.

115 Walker did commit suicide, as county coroner's records attest, but the story that he used a specially prepared silver bullet to do so remains hearsay. Interview with Ted Hammer, HLW International LLP, 7 July 2010. Hammer recalls Walker coming into the office in the early 1970s.

116 RTW, "Funeral Obsequies," ts. prepared ca. 1965–66, HLW Archives.

117 Rem Koolhaas, *Delirious New York* (New York: Oxford University Press, 1978); Paul Goldberger, *The Skyscraper* (New York: Knopf, 1981), 55–59; Stern et al., *New York 1930* , 551; Andrew Dolkart, *Touring Lower Manhattan: Three Walks in New York's Historic Downtown* (New York: New York Landmarks Conservancy, 2000).

118 Glenn Collins, "A Sturdy Survivor Gets Back to Work; Herculean Effort to Restore Verizon Building," *NYT*, 6 January 2003, B1; "A Landmark Under the Knife (Actually the Chisel); Artisans in Stone and Bronze Remake a Building Scarred on 9/11," *NYT*, 14 April 2003, F1; "Ceiling's Cleaning Grows Into a Tale of Re-Creation," *NYT*, 30 October 2003, B7.

119 All quotes this paragraph, RTW, *Fly in the Amber*, 120–121.

This postcard view of the Barclay-Vesey Building with the Hudson River in the background was taken from the top of the Woolworth Building in about 1926. Today Battery Park City sits between the building and the river.

Picture Collection, The New York Public Library, Astor, Lenox & Tilden Foundations.

Ralph Walker, after he achieved success with the Barclay-Vesey Building, became a prolific author, writing scores of essays and books. From his first published article in the 1926 *Telephone Review*, he became a contributing editor at *Pencil Points* (announced in the February 1936 issue), and contributed articles to *Architectural Record*, *Architectural Forum*, and the *AIA Journal* through the 1950s. He was co-author of *The Architect at Mid-Century* (1954), a comprehensive survey of the profession sponsored by the AIA and written with the supervision of Turpin C. Bannister. And, later in life, he self-published a series of pamphlets and books on both his firm's work and his own independent work – most notably *Humans + Materials = Architecture* (1948), *Ralph Walker, Architect* (1957), and *The Fly in the Amber* (1957). The essay reprinted here is a classic, showing Walker at his most insightful and persuasive, revealing both his approach to design and his understanding of its place within the city. He is at once expansive and specific, writing generally about urban life and about how the Irving Trust Building both absorbed and reflected the city's vitality. *Kathryn E. Holliday*

[As originally published in Architectural Forum, May 1930]

THE RELATION OF SKYSCRAPERS TO OUR LIFE

by

RALPH THOMAS WALKER

OF VOORHEES, GMELIN & WALKER

An Address for the Department of Architecture, New York University, February 27, 1930

I want to change the subject as originally announced a little bit and not just talk about skyscrapers. I want to talk about the relation of skyscrapers to our life. The urge to "build high" is probably almost as old as building itself; it is a vertical urge,–that is, just as soon as man stood upright and started to build, he tried to build vertically. A very good example,–I was looking at it a while ago,–proves the fact that this vertical urge comes through even horizontal architecture in a very noticeable way. All through the ages, men have tried to secure a vertical feeling in architecture. I want to refer to that again later on.

Most of the tall buildings of early history were built for either praising God or for catering to the vanity of man. The pyramids were built to please the vanity of a king. The Parthenon on the Acropolis was for the praise of a goddess. One may not think of the Parthenon as a skyscraper, but in its relation to the surrounding country it was placed as high as it could be placed to the advantage. It was placed there for two reasons,–in the first place to stand out as a symbol of the goddess, and in the second place because it could be more easily defended. One finds this urge for height in the shrine to Apollo at Parnassus, for instance, and in the hanging gardens of Babylon. The hanging gardens of Babylon is the first building I know of that was built for the same reason that a skyscraper is built,–that is to meet a human need, a living need. Actually, those gardens were built for the pleasure of a king and a queen, and they were built so as to resemble the mountains in the country from which the queen had come. Where we have a tall structure that has no relation to death, like

the pyramids, or to religion like the Parthenon, which was placed on a high elevation to emphasize the position of a goddess we have something meeting a human need.

The thing I want to say about skyscrapers is that we are living in an age that is a great deal different from any other age in history. In the first place, the machine has definitely exaggerated all the tendencies that heretofore have existed. The first tendency that has been exaggerated is that toward urbanization. The city is growing larger. In other words, the cities are much larger than they have ever been in the history of the world. Not only are the cities growing larger, but country life is changing the city life. In other words, up to 50 years ago there was a marked difference between life in the country and life in the city. An interesting thing is that within the last ten years, since the war for instance, I doubt whether many of us have heard the word "hick" used in a derogatory sense. In fact, the "hick" with the hayseed in his hair is definitely passing out of civilization. He is becoming to all intents and purposes a man whose life is similar to that which is lived in the city. This has brought into effect a marked change in the relations of people. It is going to make a great change in the appearance of our world in general.

Now, there is a degree of standardization that the machine is bringing into effect, but it is not a standardization that we have been accustomed to thinking of, I believe, as related to the machine. To my mind, it is a development out of provincialism and into cosmopolitanism. The farmer or the man in the country is becoming almost as cosmopolitan in his life as the man who lives in the city. The Ford car, the radio and the "movie" give to the man in the country exactly the same opportunities enjoyed by the man in the city,–transportation, knowledge and entertainment,–so that in a sense their lives are coming closer together. The farmer or the country man actually depends upon the city for a larger part of his life. Heretofore, that was not so. The country man was actually independent of the city. But farm machinery, rapid transportation and easy communication are constantly bringing country and city life more closely together, weaving them into an ever tighter and more centralized whole. Moving toward similarity of life is a tendency today.

For instance, a new country like Australia, already has 50 per cent of its people living in cities. We don't quite approach that in America, although last year over 50 per cent of the housing,–around 60 percent actually of the housing that was built in this country,–was multiple-family housing. That shows the tendency toward what one might call "urbanization." The next thing that has made a great difference in our life,–I am going to tie all this up to the skyscraper by and by,–is the specialization of effort. There has always been a certain amount of specialization. The guild of the middle ages meant a specialized effort in a certain trade. Within those guilds one would find many sub-divisions; for instance, in the cloth weavers' guild one would find the carder, the spinner, the weaver, the dyer, the fuller and so on all the way down. We today carry those specializations even further. We break it down to the conveyor in the Ford factory. That is a descendant of the handicrafts. It is hand work, a man doing a certain number of hand operations. It may be specialized, but the interesting thing about it to my mind is that it requires a higher intelligence for this specialized effort on a Ford conveying machine than it does for a man carding flax, for instance, although it may only take him three or four days to learn his work. An interesting aside on that is, I heard Mr. Swope, the president of the General Electric Company say, that in this country a man could tend nine automatic machines at one time; in Germany, five; in China, only one. In other words, the intellectual level in this country, due to our specialization, is much higher than where handicraft work is still done.

The most interesting tendency of this age, to my mind, has to do with the position of women, economically and socially. All through history women have been economically subordinate to men. Their industry as a whole has been domestic industry that did not require very much except habit and the acquirement of habits. The woman's early home industries were weaving, knitting, basket making, pot making and dressmaking. These were things done after she had finished with her household duties, and her life has always been a combination of housekeeping and some minor industry. Due to the introduction of machines, all the cottage industries have been taken away from women, even down to most of the housekeeping, except those that are still work of drudgery. But the interesting thing is that before the introduction of machinery the women

who worked were peasants largely,–that is, outside of the home. The middle class women, or, one might call them, the tradeswomen and mechanical class, were housekeepers largely. Upper class women depended upon servant labor for their luxury, comfort and ease. Up to the World War, woman's relation to the outside world was in general still that of housekeeper. If she went into business or industry it was usually to occupy herself until she married. During the war we found that women were a great deal more necessary in industry than ever before, and today a larger percentage even after marriage are engaged in industry or business. This fact has a very definite relation to the housing problem. These three things,–specialization of work, the growth of the city, and the new position of women,–have a tendency to congest cities. Specialized effort only can be done in community life. Urbanization of course means community life, and an economic position for women also means a community life. The skyscraper is a result of urbanization and community life upon which I shall enlarge later.

There are also three other things, which I shall treat briefly, that have had a great deal to do with this closer tie between city and country life and the spreading out of city life in a universal way. One is shorter working hours. Not only the shorter day but the shorter working week has, strange to say, brought people together. It has again meant specialization which in turn has meant community life. In other words, a man living alone works from sunup to sundown. It is only by the concentration of effort that one can have shorter working time. Of course we all know what rapid transportation and easy communication, such as the electric trains, the subway, the telephone and the telegraph have done toward actually condensing the city. Again, they are community efforts. It is much cheaper to have rapid transportation in the city than it is to spread it out over the country. The interesting this is that there are more automobiles used in the city than there are in the country. They are actually much more convenient there than they are in the country. The same is true with the telephone. One would naturally think that the telephone would spread population, but it does not. We start off with this idea very definitely,–that there are at least six, and there are really a few more, tendencies today that make for city growth.

The old city was a town where one could walk the breadth of the place or around it or across it without any difficulty. It didn't mean any transportation. The streets that were devoted to the tradesmen, the shoemakers' guild, the weavers' guild, the carpenters' guild, were all very closely constricted, and one could go from one to the other without a great deal of effort. Today the city has grown so large that one finds cities like London and Paris spread out over enormous areas. New York is spread over an even larger area. But it is a fact that the handling of traffic there is very difficult, and that they have just as much congestion in the city streets as we have with all our subways and our skyscrapers.

Now we come to the skyscraper. We have always thought of the skyscraper,–I think most of us have,–as a tall building. Those who have read anything about them have read criticisms of them as being just a means of obtaining more use from land, therefore more rent and more return on the capital invested in the land in the first place. This is largely true. There is also an element of vanity in them. A man like Woolworth built the Woolworth tower as a personal expression. Chrysler is doing the same thing, and I am sure that Smith and his group are doing the same thing in the Empire State Building. Leaving them out of consideration,–those great piles built to personal vanity,–there are enough skyscrapers being built in New York that have a definite relation to life to prove the point that I am going to make. The skyscraper, to my mind, is the only means, and I am making that very broad, of living in this age of machine. It is a perfect example as an expression and a reflection of the age. It is built by probably the finest piece of organization outside of the automobile industry, a cooperative effort that is amazing to everybody from the other side who comes here and sees it. If we can make the assumption that the skyscraper exists as a means of living and not just a means of making money, I think we are going to have an entirely different point of view. We shall then try to design the city to take care of the skyscraper, instead of trying to impose the skyscraper on a city that was planned for a wholly different type of building. One of the complaints, perhaps the chief complaint, that we have against the skyscraper is not due to the building itself but to the plan of the city in which it is built. It is very easy to contemplate a skyscraper,–we are making

a study in our office of this condition,–taking the place of a village. We are taking a unit of Radburn, N. J., which is claimed to be a town built for the automobile age, with a unit of some 36 houses. Placing the equivalent of these 36 houses in a skyscraper, we find that we could build fireproof homes, give all the people hill-top sites, give them more bathrooms, give them a garage with a complete workshop, a nursery for children, so that the women need not stay at home to take care of the children,–all this for less, and this is what our figures are today, than we could build a series of individual houses for. One can easily see that we could make an enormous saving in all the roads, sewage and water supply; the electric light company could make a saving on its pole lines, the telephone company could make a saving on its pole lines and its services, and we can begin to pool the results actually.

Now, economically that is so. One will say that socially it is not so good, and to me and my generation, it makes no great appeal. We would not care to live in that sort of housing. Nevertheless, I belong to a generation that was born in private houses. This is becoming less true. The sentiment attached to a house from the standpoint of its being a birthplace is passing away. Most children now are being born in hospitals. The tendency will be more and more that they be born in hospitals. The sentiment connected with the fact that the house was the homestead of the family has already disappeared, here in America. No one thinks of the single-family house any longer as homestead. I doubt if there is anybody in this room whose family has a homestead. There may be a few, but there are not many. The sentiment attached to the single-family house is rapidly going. If the women no longer occupy only the position of housekeeper in the home, but instead want and demand greater freedom, this is also going to take away some of the sentiment for the single-family house, and we shall find that community-housing,–and I am not thinking just of the apartment house, but actual community type of housing,–will become more and more common.

One can actually save land by building a skyscraper. In this city which we built on the Radburn idea, I think our ratio of land used for building was something like 5 to 30. In other words, the builders of Radburn used about 30 per cent of this area for housing, and we used 5. We regained an enormous amount of area which we could actually use for play and recreation. Under the present system in Radburn, there is no real land devoted to recreation. One couldn't have a series of tennis courts adjacent to the house. All of the tennis courts shown on the Radburn plan are temporary and planned to be moved off whenever the land is needed. Actually, if one used the same amount of land for community housing that would be required for housing the same number of families in single family houses set 10 feet apart, the land would be used economically and to much better advantage.

I tried to suggest to a certain extent the social side of the skyscraper. I don't know whether I have been convincing or not. I should like now to take up the subject of the city plan. As I have said before, most skyscrapers are built in cities which were planned for two- or three-story houses. The streets were planned for the horse-drawn vehicle, which probably goes eight miles and hour, and for the man who, at a very good pace, walks three and a half miles an hour. Upon a city thus planned we have endeavored to superimpose a type of building that is 100 stories high and upon the streets of this city a motor transportation which, to get economy out of it at all, should proceed at least at 40 miles an hour.

An interesting commentary on this situation is that the city keeps having "growing pains" all the way through its history. London is a very good example. At the end of Queen Elizabeth's reign, the coach was introduced into England. In about 40 years, there were 25 of them in London, and the London City Council, or whatever was the governing body at that time, passed an ordinance saying that there were to be no more coaches,–that they were actually blocking the public ways. Twice since then, before the introduction of the automobile, the London City Council has passed the same ordinance,–that there should be no more stage coaches. In other words, the streets which at that time were 12 and 15 feet wide were jammed by the coach just as our streets at the present time are jammed with the automobile. One of the reasons for our streets' being jammed by the automobile is not the existence of the skyscraper. It is the things that have to be brought to the skyscraper. The fault lies not in the building itself, but in the means by which we handle the freight

that is brought to it. Many of the side streets, one will find, are used for parking. We can get four lanes of cars going through these side streets, but two of them are generally taken up by parked vehicles. When a truck is "staggered" on the street to get freight off the rear end, the width of the street is reduced to one lane of traffic. This condition exists at almost any time during the day. Actually, parking and freight delivery belong to the building and not to the street at all. The streets should be used for the purpose for which they were designed, which is motion. All parking and freight delivery should be within the building.

In considering the relation of the city plan to the building, this condition must be recognized and taken care of. It is bound to exert a great deal of influence on the plan of the future city. At the present time most of our cities are laid out on the gridiron plan. We have a series of very narrow streets running in one direction with wider streets or avenues crossing them in the opposite direction. The blocks formed by the intersection of the streets and avenues we fill up solidly with buildings. One would naturally think that to get rid of traffic more streets were needed. To my mind the future building is not going to occupy one block or part of a block, but will probably occupy several blocks. S.W. Straus & Company figured out what should be obvious, that it is much more economical to build over the entire block than to have a number of separate operations on one block. If this is true, and, as I say it is obvious to me at least, it would be much better if we could erect a building covering several blocks and make wide streets all around it. We would increase the street width for lights and air noticeably. Then, the first floor of such a building should be used for the parking of trucks and the unloading of freight. In other words, the streets would actually be used to take care of vehicles in motion only.

One will ask, perhaps, that if we used this first floor for the handling of freight and parking, where are we going to place our shops? Well, it is just as easy to build shops on the second floor. In fact, if these buildings get to a point where one of them is housing for business and for living, a population of from 50 to 60 thousand people,–because the building for the New York Life, it is contemplated, will house 30 thousand people during working hours and it only covers one block,–this population is that of a second class city. One will find that by necessity this building will have a certain number of stores to take care of its tenants. The thing we have to get into our minds in thinking of a skyscraper is that it is not a *building* but a *city*. If we have a population of from 30 to 60 thousand people in buildings, they are no longer just buildings, but cities. A building of that type is as much a city as the pueblo is a village for the Indians of the southwest.

The logical thing to do in designing a skyscraper would be to arrange for courts coming down through the building, and then, as I say, use the ground floor for parking and for delivery of freight. In downtown New York we could probably put the parking below grade. It all depends on foundation conditions. The best place for stores in a building of this sort would be up at the center of vertical travel. It is quite possible that we may have a ground floor arcade of stores, or we may have an arcade of stores going around all four sides of the block. We are coming to be people who depend on elevators and not on stairs. It doesn't make any difference, once we get into an elevator, whether we go one floor or ten floors or 40 floors or 60 floors, and it will soon be 100 floors. The time element is not important. The only time element of any importance in an elevator is how long we have to wait for it. We are all children of swift motion these days, and riding on an elevator is not any more unpleasant than riding in an automobile or an aëroplane. As I say, stores may be on upper floors. I can conceive that when we get this sort of thing we may even have branches of department stores.

Under a plan such as this we shall be leading cooperative lives in every way except socially, and gradually we shall begin to lead a cooperative social life. Then life will be entirely cooperative. In other words, grocery stores and meat stores logically belong to a community. They should buy more cheaply because they buy in bulk. Their rent will be lower, and in fact one of the things that I think a skyscraper will do when it is fully developed will be to give people more value for their dollars, and then they will have more dollars left for things other than living. That is not true today, but the tendency is in that direction. Actually, we shall see that instead of having more streets we shall have fewer

streets, because we have abolished some of the reasons for having street area by placing shops, parking spaces and delivery courts within the building.

Coming back to the shorter working period, we are now in a time of the five-day week. This will probably be general for the next 5 or 10 years, and will be the beginning for even shorter working weeks. If Edison and Ford are correct, we are probably due for a three-day working week. That will not be likely to happen in our generation, but it will surely happen in time to come. That means that men will have a great deal more leisure than at present, so they will probably use buildings in the city for parking places only, as they will want to get out into the country for rest and recreation if they have two or three days to do with as they please. This is what our age is coming to.

One of the reasons why I think we shall have a tendency to become even more individual than in any preceding age is because people will have more time to do things that they want to do. People will not be able to say: "You can't do this, or you can't do that," all of which means that we must work out some sort of a system for getting people out into the country. Le Corbusier has an idea, with which I don't altogether agree, that there was a time when a city might be said to be roughly a large town with walls around it in which one could walk to any place without difficulty. We are still trying to design the city that way. One could have an office in the center of the town and live outside the town. And it wasn't very difficult to get back and forth. Now we have New York with Westchester County, and Long Island and New Jersey and Staten Island grouped around it; we are all working in the center of Manhattan Island, and we go way out here and way out there in this direction and that to live. "Suburbanites" and "commuters" we are called.

Well, it seems to me that we have reached the limit of this sort of thing so that we may have a city here in which part of the people can live and a city there in which another group of people can live, and so on. In other words, for the people who actually work, the old type of town should be brought back, where it was possible for them to walk to and from their work. In that skyscraper which I have sketched for you, occupying three blocks or more and having vertical transportation, the horizontal transportation will be within its walls, which will take a great deal of the floating population off the streets, as well as off the subway.

Now comes the question of how to get the people out to the country for week-ends, and what sort of places they are going to live in when they get there. We have developed rapid transit already. Flying fields can be arranged for the use of people with large incomes, and electric trains and automobiles will serve, as they do now, to take the rest of the people beyond the city rapid transit facilities. Also, we must have larger and wider roads to permit greater and safer speed, so that it will be possible to run an automobile continuously at 40 or 50 miles an hour. This can't be done in or about New York at the present time. There is only one street in New York on which an automobile can actually make good time, and that is Park Avenue above the Grand Central Station. I think that my idea of building a series of cities within the city where a man may have his home and his business close together is different from that of Le Corbusier.

I have been talking about the skyscraper and a new type of city plan from the social standpoint. Now I am going to talk about their appearance. As a matter of fact, elevators are in their infancy, heating is in its infancy, ventilating is in its infancy, lighting of buildings is in its infancy, and so is the building itself. I think that as architects we might be interested in thinking of the problem from the standpoint of appearance, so I will talk about beauty and stop talking about being practical. Let us consider this a city of four-story houses, and suppose that there is a skyscraper built in its midst. I think we can all see that if this were to be the only skyscraper in the town we would design it from a viewpoint of mass rather than detail. It would be much more important that the building should have a pleasing mass than that the details which could be put on it should be good, because most of the detail on skyscrapers is too high up for examination or appreciation. But suppose we put another skyscraper alongside of the first. We would then want to decorate this building in a way to interest the people who would be looking out of the windows of the other tall building. If we build a series of skyscrapers, what we have actually done is taken the street line and raised it every floor that we build. This decorative treatment then, to be logical, should be carried all the way up and on every

exposed face of the building. Although the Woolworth Building is one that modernists don't think much of because it has Gothic detail on it, to my mind it is still the best example of the skyscraper in New York. A good example of another type is the Transportation Building alongside of it, which has no decorative interest at all. But you stand over in the American Telephone & Telegraph Building, for instance, and look across, and you find decorative interest in the Woolworth Building all the way up, story after story.

We figured out, roughly, that the building we are doing at One Wall Street would in one year have 200 thousand people looking at it from all sides,–from adjacent buildings, from the streets, from people coming in on business, from tenants, and so forth. This is equivalent to the population of a first class city. The people who are looking out of the windows of tall building should have something to interest them. This brings me to a point that I want to make about design. Design is divided into two kinds. One kind is physical design, controlled by the necessities of the human body in its housing, and inspired by the desire to house it well and efficiently. The other kind is psychological, which design to my mind is very much more important. I think the architect of the future will have to be a psychologist, because it is just as important for the architect to design a building for man to be mentally comfortable in as it is for him to design one in which he will be physically comfortable. Take a room like this. It is good enough for me to give a lecture in and for you to sit and listen in. But to my mind, it is a deadly room. I find it very hard to talk against a deadly room. If I didn't see a bright face here and there it would be still harder. Now, I know that this room could be designed and decorated so that it would be easy for me to talk in it and so easy for you to listen in that you wouldn't go to sleep.

I think it is important that we consider the facts that the exterior of a building has to be viewed by thousands, and that we have got to give them mental relief and pleasure. In the shorter working time of which I have already spoken, people will work harder during the time that they are working. The speed will be much more intense, so we have to consider the fact that people will look about them more.

Whether we call it beauty or whether we call it mental comfort, I shall not make the distinction, because the question of taste is debatable. But I do think that the next generation or two will be able to appreciate beauty and to plan for mental reaction and satisfaction. I have made a statement around my office,–and I see some of the boys here and they will recognize it,–that no room is large enough, because after you have lived in it for a while you feel the walls come in to you. It becomes too familiar. Actually, what a room should do is to lose its walls for your mind's sake. You should feel space rather than seclusion and restriction in a room. A very good example of this characteristic is something they have in jails,–a steel box, 6 feet square with a door in one side with bolt holes for ventilation, and one lamp hanging from the middle of the ceiling. They put a man in this box for punishment. The temperature of this room never gets beyond that of body heat, which is quite warm but not uncomfortable. It can be endured. The man sits in this room or lies in it or stands in it, but he sees nothing but the six sheets of steel which enclose him. He has one light. He cannot be left in this room or box more than two hours before he is mentally affected, and as most of the prisoners do not realize the fact that they can ask for a Bible in solitary confinement, they get no mental relief or relaxation. The interesting fact is that if you left a man in this box cell for 24 hours he would become insane. He begins to imagine that the room is very much better than it actually is, that the light is a great deal brighter than it really is, and that the air is fouler than it actually is. This mental strain reacts on the mind and wears down the mental resistance and nerve tissues to such an extent that it drives the man insane. Now this is an extreme illustration to bring out the point that no room is large enough. As a matter of fact, this cell room is large enough for comfortable occupancy if one had the means of entertaining oneself. This brings me to the point that whether we call it beauty or mental comfort, things must be designed to please and entertain the mind. It is very important to do this. It can be done in a brick building by making different motifs out of brick, or in a stone building by use of carved decorations or different textures of stone. All this sort of thing must be carefully considered in designing a building.

I myself am not an admirer of the extreme modern work done in concrete, steel and glass in Europe at the

present time. I think it is a physical expression of a machine age without any appreciation of what the machine can do. It is like a young painter who came in to see me a while ago with a series of paintings of cog wheels. I looked at them without enthusiasm or pleasure. He said, "Don't you think that they are interesting?" I said, "Well, it seems to me that you have never seen machinery." He said, "What do you mean." "Well," I said, "I would go, if I could, up to the Rockefeller Institute and look at the finest microscope they have. Then I would go to some observatory and see one of the biggest telescopes. I would look at machinery from the standpoint of perfection and precision. I would not look at it from the standpoint of power alone." In other words, the mind, it seems to me, is interested in this point of view much more than it is in just the application of power. The artist said he had received the same criticism from a scientist, so he though that he would follow out my suggestion. To my mind Le Corbusier is creating an expression of power and not an expression of precision. Here in America we are trying to get what might be termed a feeling of beauty into our buildings. Whether we are successful or not, I don't know, but at least we are getting mental relief out of the work that has to be done. We have tried several ways of doing this. Architecture and music are somewhat similar in character. In both, you can develop harmony, you can break up harmony with dissonance, if you wish, and develop a higher harmony. You can do many things with it. You can create rhythmic beauty.

You will find that the Baroque architects thought of architecture as something rhythmic even more than did the Greeks, who had a simple, almost primitive rhythm of one column and a space used in repetition. To my mind, the fine thing about the Baroque was the sense of rhythm that existed in the building, forgetting all its bad design and Rococo ornament and its lack of invention in detail, the placing of which was always full of rhythmic value. We have expressed in the skyscraper a good deal of primitive rhythm, the rhythm of the drum beat. The "dum-dum" rhythm it is called.

At One Wall Street, in the building for the Irving Trust Company, we have tried to superimpose one rhythm upon a basic rhythm. We have one rhythm which goes around the entire building. These rhythmic motifs are not the same size. Although we endeavored to break them up, still they didn't give enough interest, so we decided to break them up again, which happens generally to be about every 20 to 22 feet, with another motif, which we enlarged. This we broke up in a way and placed our basic rhythm above it. It is a sort of fluting motif. We are a little old fashioned in our belief that one would rather have some solid spaces in the walls than to have them all glass. We do it too because of Hood's idea that the people on the inside can use only a certain amount of light; they cannot use too much. It is possible to have too much light as well as to have too little light. So, what we actually have on the face of our walls is two rhythms, one imposed upon the other. We believe that the building is going to show, as a matter of fact, the influence of this rhythmic design. To my mind it is quite sophisticated and quite in line with our machine age in which precision as well as motion is necessary. I think the design will have a lot of power at the same time. But it is no longer a primitive expression,–that is certain. It is a very sophisticated rhythmic movement, in which even the windows conform to the movement. As we went up vertically in designing the building we found that the long flutings did note require much above them. Our eye was able to pass over this break without interruption. The mistake we made on the Telephone Building was that we placed too much decoration in certain places. In this new building the design is actually readable. It reads from the point of view of a man on the street looking up who should feel the power of that vertical lift upwards throughout the entire wall height. The design keeps on up with a slightly different rhythm as it approaches the top, where it breaks into a crowning rhythm.

This design for the new Irving Trust Building isn't wholly my contribution. I am not talking about my work, necessarily. I am talking about the work of a group of men. This is what is happening in our office today,–groups of men work on each problem. Mine happens to be, for our office, the standard of taste. I am the analyst of beauty, so to speak, but the final design is the work of many minds, each contributing something to it. It is not the work of my mind alone. We all feel that we have created something that is modern, spiritually and mentally, rather than modern for the physically modern.

Walker designed the Irving Trust top floor observatory to allow views of the surrounding city. Visible below is the pyramidal roof of the Bankers Trust Building (1933) at 16 Wall Street and the stepped base of the Bank of Manhattan Trust Building (1930) at 40 Wall Street.

Photograph by Berenice Abbot, 4 May 1938. Miriam and Ira D. Wallach Division of Art, Prints and Photographs, New York Public Library, Astor, Lenox, and Tilden Foundations.